

AC 4411(1) COLCHESTER

BOROUGH OF



COLCHESTER.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

FOR THE YEAR

1914.

COLCHESTER :

Printed by Cullingford & Co., 156 High Street.

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BOROUGH & PORT HEALTH COMMITTEE, 1914-1915.

Chairman :

Alderman HENRY LAVER, J.P., M.R.C.S., F.S.A.

Deputy-Chairman :

Councillor R. B. BEARD, J.P.

THE MAYOR :

(Councillor W. Coats Hutton, J.P.)

Councillor J. W. BARE.

Councillor W. H. TAYLOR.

„ H. J. EVERETT.

„ T. B. TURNER.

„ T. SMITH.

„ A. WENT.

Staff of the Public Health Department, 1914.

Medical Officer of Health, Public Analyst and Medical Superintendent of the Borough Isolation Hospital :

WALTER F. CORFIELD, M.D., B.S., D.P.H.

Sanitary Inspector :

T. WELLS, Cert. Roy. Sanit. Inst., Cert. Meat. Inspector.

Laboratory Assistant and Clerk :

A. FISHER, Cert. Roy. Sanit. Inst.

Assistant Sanitary Inspector :

C. S. HUMPHREYS.

Disinfecter :

G. T. HEWES (on service with H.M. Forces).

B. COLLINS (temporary).

Health Visitor :

Miss SASSE.

Junior Clerk :

R. ARNOLD.

Matron of the Borough Isolation Hospital :

Miss K. BRAIDWOOD.

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PUBLIC HEALTH DEPARTMENT,

36 STANWELL STREET,

8th May, 1915.

TO THE MAYOR, ALDERMEN AND COUNCILLORS
OF THE BOROUGH OF COLCHESTER.

GENTLEMEN,

I have the privilege of herewith presenting to you my Sixth Annual Report upon the Health and Sanitary circumstances of the Borough of Colchester.

The Report is arranged in the form that was adopted in 1913, as this arrangement is found a convenient one.

The year under review will always be one of historic importance, and Colchester is one of the places that felt the effects of the declaration of war at once.

The Garrison became a centre of great activity. No sooner had the Regiments then quartered in Colchester left than the Troops of Kitchener's Army began to take their place. These were about four times as numerous as the original Garrison. The married quarters had to be adapted for use as barracks; soldiers' wives and children had to find accommodation in the town wherever they could; huts had to be built to accommodate the men who, as the winter approached, could no longer be kept under canvas.

These huts took time to build and the men had to be billeted upon the town until the huts were ready. This meant crowding many of the houses in the town to the verge of danger. Many four-roomed houses having two or three persons sleeping in every room each night while the pressure lasted.

The estimated increase above the normal population was some 20,000 persons, and when it is remembered that the usual population is 45,000, the danger to the Public Health by this great influx of persons will be at once appreciated.

By the end of the year the time of greatest danger was over. Two large Temporary Pavilions had been erected at the Civil Isolation Hospital, the military huts were making headway, baths and social rooms had sprung up in various parts of the town for the use of the troops, and the men themselves were feeling more at home, learning their duties and their way about and showing by their behaviour that they appreciated the urgent necessity of the call that they had answered.

I wish to lay particular stress upon the fact that the Troops in Colchester from the beginning of the War have throughout behaved with orderliness and sobriety. Many persons foretold all sorts of harmful results from the great increase of the Military Population, and particularly as the result of the large amount of billeting that took place. These persons proved to be false prophets. From the beginning of August to December 31st there were only four cases of drunkenness in soldiers at the Police Court, and of these two were dismissed. Recently (April, 1915), careful enquiries have been made into the likelihood of the arrival of so-called War Babies in Colchester, these enquiries show that the War Baby is practically non-existent so far as the Borough is concerned.

The arrangements with the Local Government Board, Essex County Council, and neighbouring Urban and Rural District Councils for receiving cases of Infectious Disease from these neighbouring Authorities and cases of Tuberculosis from the County Council into your Isolation Hospital at length appear to be satisfactory to all parties concerned, and it should not be long before the new arrangements are in full working order.

It was generally expected that the Death Rate would be greatly raised by the influx of troops and general mental strain,

This was not so, the unexpectedly low rate of 11·4 per thousand being recorded.

I have pleasure in reporting that the Staff of the Department have worked loyally and steadily through a period of great stress. Some assistance has been obtained by the appointment of an office boy, but this was reduced by the loss of George Hewes, the Disinfecter, who was called up by the War Office in the middle of August, his place having to be filled by an untrained man who had to learn the work.

The strain has been felt even more severely at the Isolation Hospital, where the work was only kept at its normally high standard by the unflagging efforts of the Matron seconded by the senior Nurses.

In conclusion I beg to thank the Chairman and Members of the Borough and Port Health Committee for their courteous consideration and continued support. Also I wish to take this opportunity of thanking the Staff of the Health Department and of the Isolation Hospital for their loyal assistance throughout the year.

I am, gentlemen,

Your obedient servant,

WALTER F. CORFIELD, M.D., B.S., D.P.H..
Medical Officer of Health.

The Public Health.

Report of the Medical Officer of Health, for the year 1914.

VITAL STATISTICS.

The Table below gives the birth and death rates and populations of certain towns for comparison with similar figures for Colchester:—

	Colchester.	Cheltenham.	Bath.	Oxford.
Population	45,140	49,500	70,292	54,348
Birth Rate	19·5	15·98	15·3	16·8
Death Rate (Standardized)	11·4	12·22	11·25	11·17
Infantile Death Rate	82·7	89·6	59	72
Zymotic Death Rate	0·95	0·64	0·28	0·53
Respiratory Diseases				
Death Rate.....	1·7	1·88	1·89	1·9
Pulmonary Tuberculosis				
Death Rate.....	1·0	0·78	0·90	0·94
Non-Pulmonary Tuberculosis				
Death Rate.....	0·08	0·22	0·30	0·20
Cancer Death Rate.....	·86	1·25	1·27	1·37

Notes upon the above Table.

Deaths from Pulmonary Tuberculosis are not included in the Respiratory Diseases Death Rate.

As was explained last year, the standardized death rate is the death rate corrected for the age and sex distribution of the district to make it comparable with that for England and Wales.

The rates are all calculated per 1,000 inhabitants except the Infantile Death Rate; this is calculated per 1,000 infants born.

The principal Zymotic Diseases with the number of deaths each caused during the year are:—Small Pox (0), Measles (18), Scarlet Fever (2), Diphtheria (6), Whooping Cough (0), Typhoid Fever (3), and Infantile Diarrhoea (14).

The deaths of the twelve soldiers from the front who died in the Military Hospital, and one Belgian Refugee who died in the Civil Hospital, have been omitted in calculating the above Death Rate.

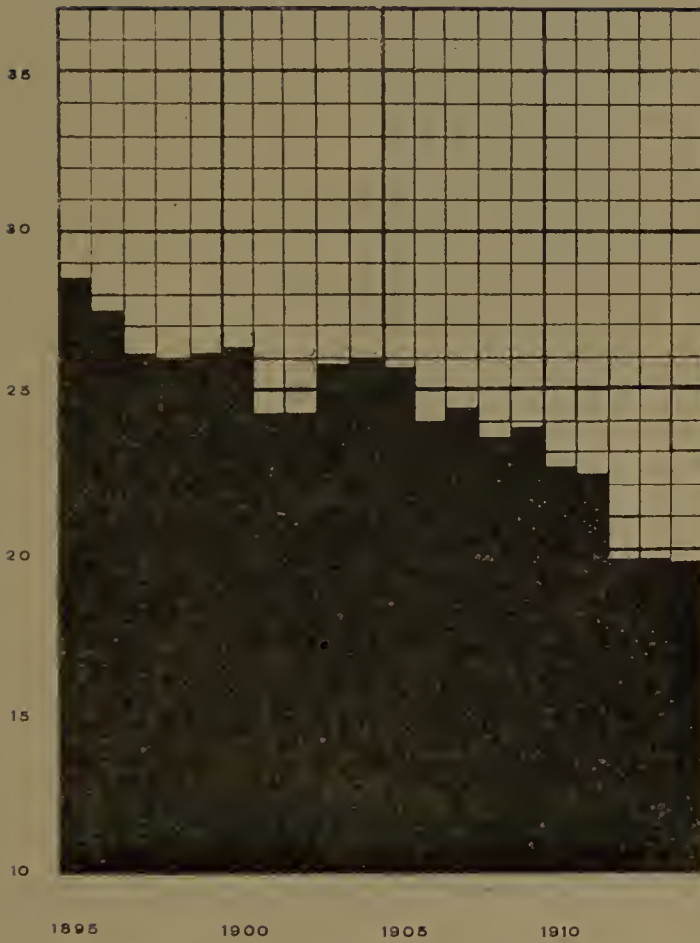
POPULATION.

The estimated population shows an increase of 440 persons. But this was estimated upon the assumption that the population would not exceed the same steady increase that has continued for many years past. Instead, two factors have upset this calculation, and it is necessary to reconsider the estimate.

The first and smaller alteration took place at the end of 1913, when Severalls Asylum was occupied. This added 1,926 persons to the population.

But for the estimation of the population this total must not be added as a whole to the previous estimate, as many of the inmates do not belong to Colchester, but have been sent to the Asylum from other parts of Essex. Dr. Turnbull, the Medical Superintendent of the Asylum, has kindly supplied me with the figures necessary for estimating the increase to the Borough population, and Dr. Turner has kindly supplied similar figures for the Royal Eastern Counties' Institution for Idiots, Imbeciles and the Feeble-minded.

CHART A.



Birth Rates for Years 1895—1914.

Population of Severalls Asylum and the Royal Eastern Counties' Institution.

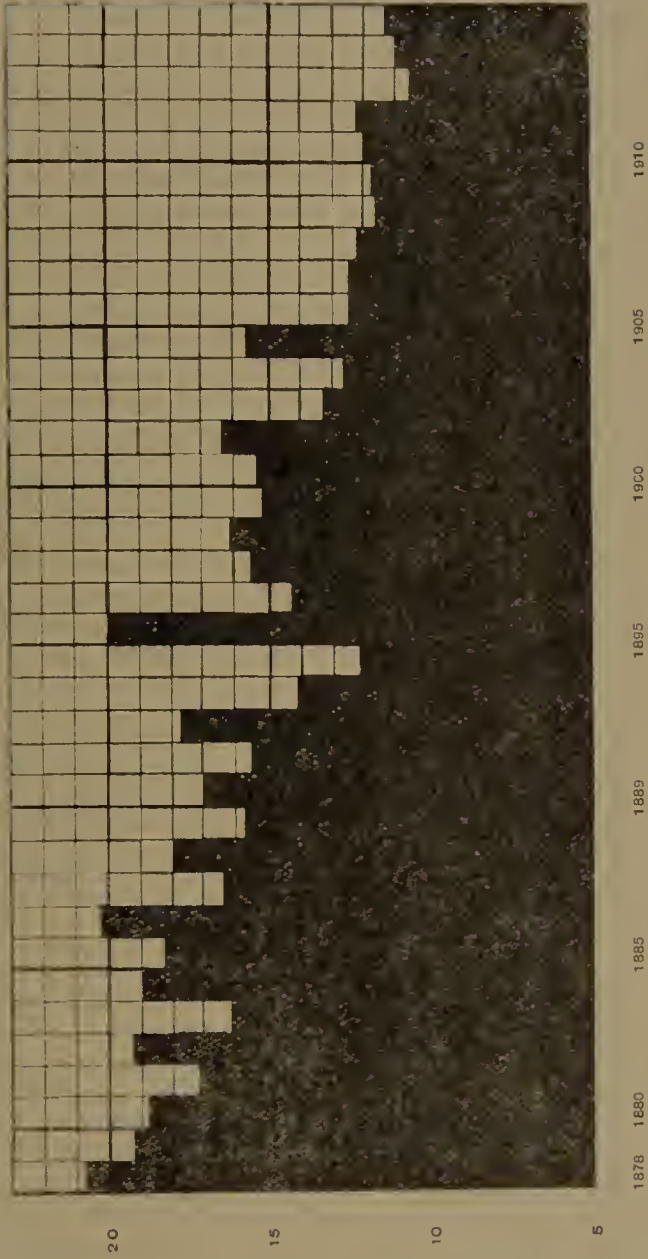
	Colchester Residents.		Not Colchester Residents.	
	Severalls Asylum.	R.E.C.I.	Severalls Asylum.	R E.C.I.
No. of Inmates on Jan. 1st, 1914	89	17	1021	371
No. of Deaths or Removals during 1914 	27	0	175	28
No. of Admissions during 1914	39	1	329	54
No. of Inmates on Dec. 31st, 1914	101	18	1157	397

Excluding the Inmates the Staff of the Asylum numbers 246 persons.

The population of Colchester has therefore been increased by the return of 89 Colchester residents to Colchester, the majority of whom at the time of the census were counted in some other town, also the greater part of the staff of the Asylum are probably new comers to Colchester, and so they may be added to the population figures, and thus the population has been increased above the estimate by roughly 300 persons who belong to Colchester, or who have become Colchester residents.

In the same way the inmates of the Eastern Counties' Institution who are not Colchester residents must be deducted from the population, and as this figure is also roughly 300 persons, the nett result of the occupation of Severalls Asylum from the statistical point of view has been to correct the number of non-residents in the Eastern Counties' Institution, and no more than that, leaving the population as estimated.

CHART B.



Colchester Death-Rates for Years 1878-1914.

The second and much larger alteration is so great and in part so uncertain that it is very difficult to estimate at all exactly. This alteration comes about from the very great influx of soldiers, their wives and families, and the numerous followers that have been attracted to the town by them.

Col. Newland, the Assistant Director of Medical Services, Colchester District, has kindly supplied me with the following figures :—

			W.O.'s, N.C O.'s and Men.	Officers.	Women	Children.
January	...	...	2781	102	350	586
February	...	...	3266	111	350	573
March	...	...	3589	150	343	585
April	...	...	3538	149	336	572
May...	...	...	3484	149	336	574
June	...	...	3652	144	340	572
July...	...	...	3445	141	348	569
August	...	...	3500	113	254	428
September	...	...	10186	218	...	...
October	...	...	14592	381	...	...
November	...	...	16721	451	...	...
December	...	...	16401	500	...	...

These show that up to August 31st, 1914, the garrison was of about its usual strength. The troops then in the garrison very soon left for France, and the whole of the barracks were occupied by a part of Kitchener's Army. The married quarters were emptied and turned into barracks for the men, and the greater part of the town was billeted. About the same time the Norfolk and Suffolk Territorial

Infantry Brigade and Army Service Corps, and the 2nd East Anglian Royal Field Artillery Brigade and Field Ambulance Brigade, arrived in Colchester, to the number of 4,800. Thus in soldiers alone for the last four months of 1914 the population was increased by 17,000 men. To this number must be added an estimate for the families and followers of this mass of men. This at the lowest estimate must be put at 2,000.

So that to the estimated population of 45,140 must be added 19,000, giving a population of 64,140 for the last four months of the year.

Even this figure, which may be considered fairly accurate as a total, is of little use for statistical purposes. In calculating death rates the deaths of persons who die away from their homes are counted as belonging to their home districts, the Registrar General transferring the death from the one district to the other. This applies also to the men of Kitchener's Army and the Territorials who have permanent homes elsewhere, but does not apply to those who have no permanent home, nor does it apply to foreign troops or refugees.

The only way appears to be to ignore the troops altogether and take the civil population as it would be if the war had not occurred, hoping that all those who have recently come into the town, both troops and others, have a permanent address elsewhere, at the same time excluding from the death returns the deaths of all British and foreign soldiers and refugees, and making a separate return for them.

But it must not be forgotten that this enormous influx of population will have a deleterious effect upon the usual population. The houses will be overfull, not just here and there, but throughout the town, and few things are worse for the public health than overcrowding.

To lessen this, huts are being built as rapidly as possible; but if the troops are only billeted upon the houses in the town for six months the result will show in the death rates for 1915, though they have not seriously affected those for 1914.

BIRTHS.

Chart A shows that the Birth Rate has again fallen slightly. In 1912 and 1913 it was 19·7 for each year; in 1914 it is 19·5 per thousand of the population, a terribly low rate.

Table I. at the end of this report shows how much this rate has fallen of late years. The number of births—which only four years ago was well over 900 per annum—is now under 800, though the population has steadily increased.

The natural increase, that is, the excess of births over deaths was 355. This is 27 less than it was in 1913.

The 882 births during the year were divided into 448 boys and 434 girls, and were distributed in the four wards, as follows:—

	North.	South.	East.	West.	Inward Transfer.	Outward Transfer.	Nett Total.
Males ..	69	158	110	109	3	1	448
Females ...	85	164	82	103	—	—	434
Totals ...	154	322	192	212	3	1	882

There were 43 illegitimate births—equal to 4·8 per cent. of the total births, an increase of ·3 above the same percentage for 1913.

DEATHS.

It was to be expected that the death rate would increase considerably during the latter part of the year. The weather was most inclement; the town was crowded with troops; and both civil and military hospitals were being used for wounded soldiers from the front.

Taking all these adverse factors into consideration the death rate is surprisingly low. Even when the one Belgian refugee who died in

the Civil Hospital and the 12 wounded soldiers who died in the Military Hospital are included, the rate for the year is only 11·6 per 1,000.

If these deaths are excluded the rate falls to 11·3 per 1,000. -

The deaths of wounded soldiers and refugees in Colchester all occurred during the last three months of the year, and were divided as follows :—

1	wounded Belgian officer.
6	„ English soldiers.
3	„ Belgian soldiers.
1	„ German soldier.
1	Belgian refugee.
1	wounded unknown, apparently a soldier.

Most pathetic and forlorn is the last death. The formal and official death certificate bears his only epitaph, “ apparently a soldier.” His rank, his name, even his nationality, all gone. Among other wounded from the front he was brought in; he was never able to speak; his clothes not his own and no mark to distinguish him; he had been grievously wounded and came from the field of battle; and so he passes, bringing the grim reality of war a little closer—wounded unknown, “ apparently a soldier.”

The total number of deaths in the Borough during the year was 667, but 153 of these were deaths of non-residents, and to arrive at the correct number of deaths belonging to the Borough these must be subtracted from the total. Similarly the deaths of 13 residents who died away from Colchester must be added, leaving a nett total of 527.

This total, with a population of 45,140 persons, gives a death rate of 11·6, or, when the 12 military and one refugee death are deducted, a rate of 11·3.

If this rate be corrected so as to be comparable to the rate for England and Wales, the standardized rate of 11·4 is obtained.

There were 37 deaths among the Military Population, and 21 of these occurred at the Military Hospital.

The number of deaths in other Institutions was as follows :—

Total Deaths in Institutions in Colchester.

Essex County Hospital	63
Union Infirmary... ..	54
Eastern Counties' Institution	12
Borough Isolation Hospital	13
The Nursing Home	5
Essex and Colchester Asylum	112
	<hr/> 259 <hr/>

The Table below compares the Death and Birth Rates of Colchester with those of England and Wales as a whole, and of certain large and small towns.

	Annual Rate per 1,000 Living.			Deaths under One Year to 1,000 Births.
	Births.	Deaths.		
		Crude.	Standardized*	
England and Wales	23·6	13·9	13·6	105
97 great towns, in- cluding London	24·9	14·6	14·9	113
145 smaller towns	23·6	12·8	12·9	104
England and Wales, less the 242 towns	21·9	13·3	12·2	93
Colchester	19·5	11·3†	11·4†	82

Notes.

* The standardized death rates are the rates which would have been recorded had the sex and age constitution of the populations of the several areas been identical with that of England and Wales as enumerated in 1901.

† The rates for Colchester are calculated exclusive of the deaths of refugees and wounded soldiers.

Before considering the causes of death it is important to note (see Table III.) that 17 persons died and were buried with no medical certificate of the cause of death. Looking back at previous reports, it may be noted that during the past four years 42 persons have thus been buried uncertified.

These deaths were distributed as follows:—

Age.				1911.	1912.	1913.	1914.
Under 1 year	...	...		3	3	2	6
Under 5 years	...	...		1	1	1	2
Over 5 and under 45	...			—	2	1	1
45 and over	...	...	...	2	5	4	8
Total	...	...	...	6	11	8	17

It is not putting it too strongly to say that no dead person should ever be buried without a proper medical death certificate. Last year attention was drawn to the need for two death certificates—one giving in general terms the cause of death, the other a precise official document, giving the exact cause of death and duration of illness.

Now attention is drawn to the fact that some persons die and are buried without a medical certificate of any sort at all.

In a great majority of such cases the cause of death would be readily discovered by a *post mortem* examination, and such examination should be compulsory in all cases in which a doctor has not been in attendance at the time of death, and is unable to certify the cause.

What happens now is that the Coroner's Officer, who is usually a policeman, makes enquiries and reports to the Coroner, who decides whether an inquest shall be held or not. The Coroner should in no case be allowed to do this without medical opinion, and only after consultation with a medical expert should the Coroner decide that an inquest is unnecessary, and then not unless the medical expert is in agreement. In Colchester it is the custom always to seek medical opinion in such circumstances.

Causes of Death.

The whole of life may be divided into three periods for this purpose—the first from birth to 15 years old, the second from 15 to 45, and the third from 45 upwards.

In the first period death reaps a poor harvest once the first year of life is past. But the Infectious Diseases still carry off too many children.

In the second period, 15 to 45 years, Tuberculosis of the Lungs is the great servant of death.

In the third period, over 45 years, the effects of overstrain in earlier life begin to show and degenerative diseases appear.

It has been well said that every man is a fool or a physician at forty. If by the time he has reached that age a man does not know what is good for him and what is not, public health efforts are not going to help him very much to avoid fatal diseases.

Already a great deal has been done for sufferers from Tuberculosis, and this disease and the results of the past year's work in the Borough are considered later in this Report.

Deaths from the Infectious Diseases must, directly one begins to consider them, be divided into two parts—(1) Notifiable Infectious Diseases, (2) Non-notifiable Infectious Diseases.

The notifiable Infectious Diseases are :—Enteric Fever, Scarlet Fever, Diphtheria, Small-pox, Cerebro-spinal Fever, Polionmyelitis, Ophthalmia Neonatorum, Erysipelas, Tuberculosis, Cholera, Plague, Typhus Fever, Puerperal Fever, Continued Fever, Relapsing Fever.

Tuberculosis stands in a class by itself. Of the rest only the first four are common in children.

The non-notifiable Infectious Diseases are :—Influenza, Chicken-pox, Measles, Mumps, German Measles and Whooping Cough.

Influenza of these may be classed by itself. Of the others only two are dangerous diseases to child life—Measles and Whooping Cough.

Table showing Deaths from certain Infectious Diseases.

	1910.	1911.	1912.	1913.	1914.	Totals.
Enteric Fever ...	—	—	1	4	3	8
Scarlet Fever ...	1	2	—	—	2	5
Diphtheria ...	2	3	3	5	6	19
Measles ...	1	9	5	—	18	33
Whooping Cough ...	12	5	1	6	—	24

The first three diseases named may all be classed as dangerous infectious diseases. The last two are not nearly so dangerous provided those attacked receive proper attention and nursing and this is just what a great many of these children do not receive.

The table above shows the number of deaths certified as due to these causes, but it must not be overlooked that many children after both Measles and Whooping Cough are left with weak lungs with the result that they are readily attacked by Bronchitis or Pneumonia from which many ultimately die. These deaths are no doubt frequently

certified as due to Bronchitis or Pneumonia only and therefore do not appear in the above return. Even without these the deaths from Whooping Cough and Measles are nearly double those from Enteric Fever, Scarlet Fever and Diphtheria, and were it possible to include the deaths from Bronchitis and Pneumonia which have originated from Measles or Whooping Cough, the proportion would probably be more than three to one.

In London and certain other towns provision is being made at the Isolation Hospitals for severe cases of Measles and Whooping Cough, and it is well worth while considering if such provision cannot in the near future be made in Colchester. A great saving of child life would certainly result therefrom.

Before considering the deaths of Infants below one year of age attention must be drawn to Chart C, where the death rates from Cancer, Pulmonary Tuberculosis and Respiratory Diseases excluding Pulmonary Tuberculosis are set out graphically.

Deaths from all kinds of Respiratory Diseases increased considerably during 1914 and this was no doubt due to the inclement weather that persisted throughout the year. In only one month, August, was there less than one inch of rain. In July and November there were over two inches, in March 3.91 inches, and in December *over five inches*.

This large rainfall, occurring particularly in the Spring and Winter months is undoubtedly the cause of the increased number of deaths from Respiratory Diseases.

The death rate from Cancer has again fallen, only 39 deaths being due to this cause, whereas in 1913 there were 43, and in 1912 there were 47.

Mortality in Child Birth and Infancy.

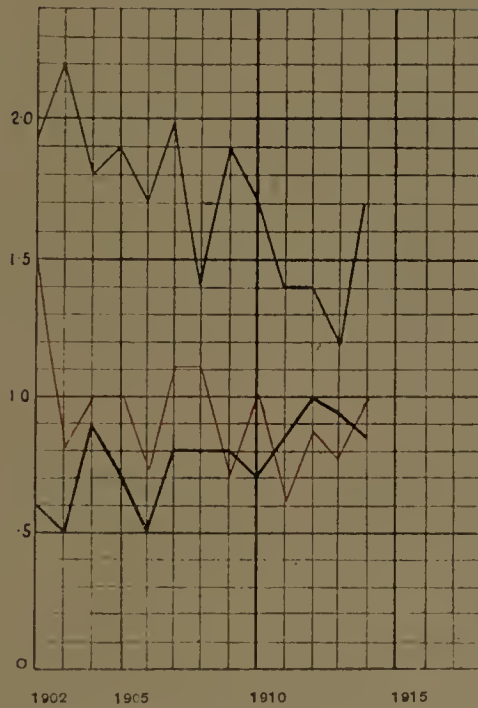
There were no deaths from Puerperal Fever, and only one case of Puerperal Fever was notified.

CHART C.

DEATH-RATES
of
RESPIRATORY DISEASES
(excluding
Pulmonary Tuberculosis)
1902-1914.

PULMONARY
TUBERCULOSIS
DEATH-RATES
1902-1914.

CANCER DEATH-RATES
1902-1914.



No deaths occurred that were ascribed to any other disease or accident of Pregnancy or Parturition.

Notifications of Puerperal Fever and deaths from this cause have steadily grown less for some years past. During the last five years the numbers were as follows:—

	1910	1911	1912	1913	1914
Notifications of Puerperal Fever	4	6	—	2	1
Deaths from Puerperal Fever..	2	3	1	1	—

The Health Visitor continues to visit all new-born infants and to enquire into the causes of infantile deaths.

Table IV., at the end of the Report, shews that Premature Birth was the chief cause of death among infants, 15 dying before they were a week old, and of the 29 deaths of infants that occurred before they were one month old, 20 were due to Premature Birth.

To avoid these premature births in many cases nothing more than special care is needed during the last two or three months of pregnancy.

It would be a great step in the right direction if pregnancy were made notifiable by doctors and midwives as soon as they were asked to attend at the birth.

Upon receipt of such notification leaflets, explaining certain risks that an expectant mother should avoid, could be sent, and in many ways the welfare of these future mothers looked after.

At present the prevention of Infantile Mortality confines itself to dealing with the infant after it is born. The next steps must be to improve the condition of the mother before the child is born.

The following table is very instructive as it shows the reduction in Infantile Mortality from Atrophy, Debility and Marasmus, all conditions due to faulty or improper feeding, and the steady loss of infant life from premature birth.

	1910	1911	1912	1913	1914
Deaths from Debility, etc. ...	18	17	6	6	2
Deaths from Premature Birth...	23	15	14	13	22

The decrease in the deaths from Debility, etc., is so marked that one can unhesitatingly say that it is due to the adoption of the Notification of Births Act, which Act came into force in the Borough during 1911.

The Infantile Mortality Rate has not been able to keep the high standard set in 1913 when it fell to the very low number of 60 per thousand. In the year under consideration undoubtedly the unsettled state of the weather, combined with the general popular upheaval caused by the war, have caused the increase. The rate for 1914 having risen to 82·7 per thousand. This increase is due mainly to three causes — the first, as has already been pointed out, Premature Birth; the second, Diarrhoea and Enteritis, which together caused 14 deaths; and the third, Bronchitis.

In the first six months of the war it is certain that babies were occasionally neglected when the father was enlisting or had already enlisted, and the mother anxiously awaited news. The routine of the household was upset and the poor baby suffered.

This time is now over; the anxiety is the same or even greater; but a new routine has sprung up, and babies are coming into their own again, their value to the country being greater than ever before.

The death rate of Illegitimate Infants was very high, being more than three times the rate of Legitimate Infants. Out of 839 legitimate children born 62 died, giving a rate of 7·3 per cent. But out of 43 illegitimate children 11 died, giving a rate of 25·6 per cent.

WORK OF THE HEALTH VISITOR.

Throughout the year the Health Visitor pays at least three visits to the homes of new-born infants. These visits are paid during the first week after birth (but after the third day), at the end of the first month, and at the end of the third month.

These are the routine visits, but besides these she pays many additional visits when the baby is weakly or ailing, and by constant advice does her best for the child's welfare.

At these visits she leaves a copy of the Infant Feeding leaflet that is issued by the Health Department and goes through it with the mother, so that she shall realize the importance of feeding her baby correctly.

If a doctor is in attendance upon the mother no feeding leaflet is left, and the Health Visitor does not visit again until the end of the month.

The usual tables giving the results of the Health Visitors visits are given below.

549 First Visits.

Breast Fed	...	...	480	Boat-Bottles used	...	...	8
Cow's Milk and Water	...	...	3	Long-tube Bottles	...	...	0
Condensed Milk	...	...	1				
Patent Food	..	...	0				

In 65 cases a doctor was in attendance, so no enquiries were made.

741 Second Visits.

Breast Fed	...	...	666	Left the Town	...	...	23
Cow's Milk and Water	...	...	24	Boat-Bottles used	...	...	40
Condensed Milk	...	...	8	Long-tube Bottles	...	...	0
Patent Food	...	...	3				

In 17 cases a doctor was in attendance, so no enquiries were made.

680 Third Visits.

Breast Fed	...	...	559	Left the Town	...	...	39
Cow's Milk and Water	...	...	50	Boat-Bottles used	...	...	83
Condensed Milk	...	...	16	Long-tube Bottles...	...	...	0
Patent Food	...	...	8				

In 8 cases a doctor was in attendance, so no enquiries were made.

It constantly occurs that the Mother is not at home when a visit is made. This happened in 121 cases and a further visit was necessary. In 18 instances parents had moved to a new address and this had to be found.

Visits are paid to those homes where a still-birth has occurred that was not attended by a doctor, and enquiries made as to the reason for the still-birth. In the 22 cases that this occurred no special reason for the still-birth could be discovered.

PREVENTION OF INFANTILE DIARRHŒA.

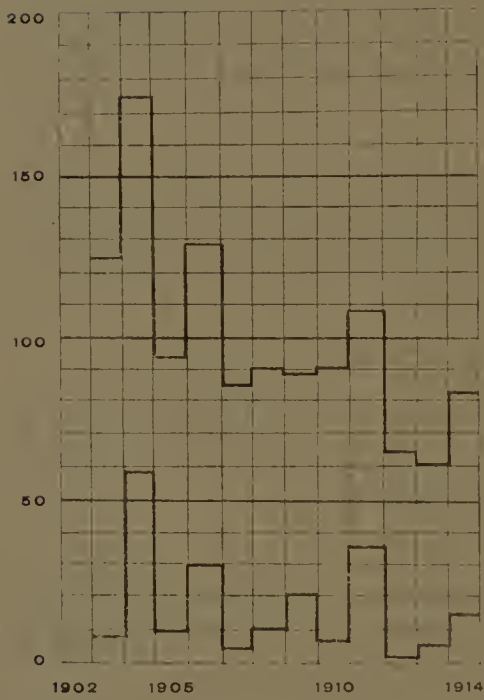
Chart D shows the Infantile Mortality Rates and Infantile Diarrhœal Deaths compared graphically since 1903.

During the warmer months from May until the end of September the Health Visitor takes a leaflet upon the Prevention of Infantile Diarrhœa to the homes of all Infants under one year. In the cases of children born during these months she leaves this leaflet with the Feeding Paper, but she pays special visits to the homes of infants that have been born since the previous September for the purpose of leaving the Diarrhœa leaflet and explaining its contents to the mother.

When these special visits for the purpose of leaving the Diarrhœa Leaflet are being paid the opportunity is taken to enquire how the baby is getting on and how it is being fed.

The result of such enquiries was very satisfactory.

CHART D.



INFANTILE MORTALITY
RATES PER 1,000 BIRTHS.

INFANTILE DEATHS
FROM DIARRHŒAL DISEASES.

**Result of 336 Enquiries made about Infants from
3 to 12 months old.**

		3-6 mths.	6-9 mths.	9-12 mths.
Breast Fed	... ..	83	92	78
Cow's Milk	... ..	5	13	8
Condensed Milk	... ..	4	5	2
Patent Food	... ..	0	1	6
Boat Bottles used	... ..	9	19	14
Long Tube Bottles used...	—	—	—	1
Spoons used	... ..	—	—	1

In 2 cases a doctor was in attendance and no enquiries were made and in 27 cases the parents had left the town.

Upon a second visit being paid to the parent using the long-tube bottle it was found that she had been convinced by the arguments used at the first visit and a boat-shaped bottle had taken its place.

**Notifications under the Notifications of Births' Act and
Summary of Health Visitor's Work under this Act.**

Number of children born alive and notified in accordance with the Act	... ..	815
Number of children born alive and not notified in accordance with the Act	... ..	66
Number of still-births notified	... ..	47
Number of routine visits paid by Health Visitor		2,306
Number of extra visits paid by Health Visitor		121
Number of removals traced to new addresses		18
Special visits to ailing infants	... ..	50
Mothers of still-born infants visited	... ..	22
Total number of visits paid by Health Visitor in connection with infant welfare	... ..	2,535

INQUESTS.

Mr. H. Geoffrey Elwes, the Borough Coroner, has kindly supplied the following details relating to the 33 Inquests that have been held in the Borough.

Cause of Death.	Males.	Females.	Total.
Suicide	5	—	5
Accident or Misadventure	5	2	7
Natural Causes	6	2	8
Open Verdicts :—			
Death from Injuries	1	—	1
Totals	17	4	21

The ages of the above persons about whose death enquiry was held was as follows :—

	Males.	Females.	Total.
Under 1 year	—	1	1
1 year and under 7 years	—	2	2
7 years and under 16 years	1	—	1
16 years and under 25 years	2	1	3
25 years and under 60 years	10	—	10
60 years and over	4	—	4
Totals	17	4	21

In eight of the above cases the deceased was not a Colchester resident.

A large number of other cases were reported to the Coroner who, after preliminary enquiry, did not consider an inquest necessary.

All deaths occurring in the Essex and Colchester Asylum must be reported to the Coroner, and this accounts for a large proportion of the cases where an inquest was deemed unnecessary.

NATIONAL AND SOCIAL CONDITIONS.

In the last half of the year under consideration the Social Conditions of the Borough were subject to a great upheaval. This was caused by the outbreak of war and the almost immediate flooding of the town by new troops.

The barracks were quite inadequate to contain the number of men sent in, and though for some weeks tents were utilized, it soon became apparent that as the cold, wet weather approached these would not be suitable for long, and the erection of huts was begun upon land adjoining the barracks.

Meantime battalion after battalion was billeted in the town. One of the chief difficulties was to arrange with the various billeting officers so that the men of the same battalion were as much as possible in the same part of the town. Even so discipline must have been most difficult to maintain and when it is remembered that the whole of the men of Kitchener's Army were new recruits, it speaks volumes for the earnestness of purpose and self-respect of every man of them when it is realized how small was the upset of the usual life of the town, and that rowdiness was practically non-existent.

Poor-Law and Hospital Relief.

The Guardians of the Poor expended the sum of £4,792 1s. 0 $\frac{3}{4}$ d. upon In-maintenance for the year ended Michaelmas, 1914. This is an increase of £167 0s. 2d. above the amount spent in the previous year.

Out-Relief cost £2,641 1s. 3½d. for the same period, an increase of £99 0s. 5d. above the figure for the previous year.

The old School House at the Infirmary is still being used for males suffering from Pulmonary Tuberculosis.

The statement below briefly sets out the use that has been made of the Essex County Hospital, which is situated in Colchester, and gives the increase or decrease in the number of patients and attendances at the hospital when compared with 1913.

Essex County Hospital, 1914.

				Increase or Decrease.
Number of Beds available throughout				
the year ..	...	...	100	
Average number of patients resident				
daily ...	...	...	85	— 2
Number of New Out-patients	...	2,050	—	404
Total number of Out-patient Attend-				
ances ...	...	...	6,326	— 1,645

The large decrease in the number of the Out-patients and the number of Out-patient Attendances is no doubt due in some part to the change in the population caused by the war, but previous to the declaration of war these figures had been decreasing. This previous decrease was probably brought about by the provisions of the Insurance Act.

WATER SUPPLY.

Almost the whole of the district is supplied with water by the Borough Waterworks. The water is obtained from the Lexden Springs and Artesian Wells, and pumped from the waterworks at the foot of Balcerne Hill into the large water tower where the soft spring water mixes with the hard well water, the resultant water having a total hardness of about 16 degrees.

The water from the springs was regularly examined every month throughout the year, and was found to be quite pure upon each examination.

**Bacteriological Analysis of the Lexden Springs
Water Supply.**

Date of Sampling	Source.	Number of Organisms developing per C.C. at		Bacillus Coli.		
		37°C (for 2 days)	22°C (for 3 days)	1 c.c.	10 c.c.	50 c.c.
Jan. 14	Lexden Reservoir.	5	6	—	—	—
Feb. 19	„	1	4	—	—	—
Mar. 11	„	1	7	—	—	—
Apr. 24	„	3	4	—	—	—
May 14	„	1	7	—	—	—
June 10	„	6	1	—	—	—
July 17	„	2	13	—	—	—
Sept. 9	„	2	3	—	—	—
Oct. 15	„	—	1	—	—	—
Nov. 12	„	1	3	—	—	—
Dec. 11	„	4	4	—	—	—

The Artesian Well water was frequently examined, and the water from the highest spring entering the well was also examined. The results of these examinations were satisfactory.

The water from several private wells was examined for one reason or another, and improvements carried out in several instances where the water was found impure.

Bacteriological Analysis of Other Water Supplies.

Date of Sampling	Source	Number of Organisms developing per C.C. at		Bacillus Coli.		
		37°C. (for 2 days)	22°C. (for 3 days)	1 c.c.	10 c.c.	50 c.c.
Apr. 24	Artesian Well	30	40	—	—	—
„ 24	Small Well, Dilbridge Cottages	70	100	—	+	+
„ 27	Main Well, Dilbridge Cottages	14	34	—	—	—
May 4	30 ft. Springs, Artesian Wells	—	2	—	—	—
„ 14	Artesian Well	10	35	—	—	—
June 8	16, 17, 18, Mill Road, Myland	117	700	+	+	+
„ 8	19, 20, 21 „ „	150	380	—	—	+
„ 8	22, 23 „ „	137	450	+	+	+
„ 8	24, 25 „ „	100	400	+	+	+
„ 8	26, 27 „ „	120	500	+	+	+
„ 10	Artesian Well	9	11	—	—	—
July 10	Brick House Farm	100	300	—	+	+
„ 17	Artesian Well	8	17	—	—	—
Aug. 24	Rose Cottages, Spring Lane	52	100	—	—	—
Sept. 9	Artesian Well	4	17	—	—	—
Nov. 17	Brick House Farm	1	3	—	—	—
Dec. 11	Artesian Well	20	21	—	—	—

The Waterworks Superintendent, Mr. Charles E. Bland, has kindly supplied the following details concerning the work of his department.

Mains.

Extensions and replacements of mains totalled 718 and 1,116 yards respectively. The present total length is about $51\frac{3}{4}$ miles.

Houses Supplied.

The number of houses supplied with the water of the Council was as follows :—

Within the Borough	9,405
Stanway District	122
	<hr/>
	9,527
	<hr/>

The supply to the Stanway district has recently been disconnected from the Council's mains, the Lexden and Winstree Rural District Council having given notice that the town water was no longer required.

The above total of 9,527 does not include the Garrison, or trade and business premises, stables, etc.

Number of Persons Supplied.

The average estimated number of persons receiving a supply from the Council's mains was 58,235.

This total is arrived at as follows :—

Civilian population supplied in the Borough (taking an average of 4·8 people per house, Government census return, and allowing for empty houses)	44,529
This figure includes the inmates and staff at Severalls Asylum, Mile End.	
Stanway District—based upon the above estimate	585
Average strength of the Military <i>for the 12</i> <i>months</i>	13,121
	<hr/>
Grand Total	58,235
	<hr/>

Meters.

The present number in use in connection with trade, business, and garden supplies, etc., is 230. These have had special attention during the year, and are now in excellent condition.

Hydrants.

There are 462 hydrants in the Borough for fire extinguishment purposes, road watering, etc.

Waste Detection.

Waste-detecting meters are periodically worked for the purpose of localising hidden and other waste. I attribute to the constant inspection for waste and the enforcing of the Council's Bye-laws in connection therewith, the satisfactory consumption per head per day of 17 gallons referred to later on.

If waste and misuse of water is not kept under proper control, management expenses are greatly increased, and the water supply possibly jeopardised.

In some towns I find the consumption per head per day is 30 gallons, and in others as high as 50 gallons.

During the year 5,249 defective service pipes and fittings have been dealt with by our inspectors, viz. :—

Repaired free of charge by our staff	...	...	4,596
Remedied by owners after notices had been			
served upon them	...	...	653
			<hr/>
			5,249
			<hr/>

This number shows an increase upon any preceding year, and is due to the working of the waste-detecting meter system already mentioned, and also to the large number of householders who now report to the office immediately any waste occurs.

Quantity of Water Pumped.

The total quantity of water pumped during the year was 416,912,500 gallons, viz. :—

	Gallons.
Pumped into the Water Tank, Balkerne Hill	368,697,500
Surface spring water supplied by <i>separate</i> mains and reservoirs to Great Eastern Railway Company's North Station ...	48,215,000
	<hr/> 416,912,500 <hr/>

This is an increase of 33,113,500 gallons over last year's figures, and is mainly due to the large number of troops stationed and billeted in the town.

I desire to impress upon the inhabitants the utmost importance of avoiding waste and misuse of water, as owing to the number of troops in the Borough the consumption has enormously increased, and exceeds the quantity pumped per day in previous years during hot and dry summer weather.

The Average Consumption per head per day.

For all purposes, including road watering and making, fire extinguishment, flushing sewers, trade and business supplies (but excluding the G.E.R. Company's spring water supply) was 17 gallons.

Lexden Water.

A sample of these springs has been collected monthly by the Medical Officer of Health, and a bacteriological analysis and report thereon submitted to the Water Supply Committee, the result in each case being very satisfactory.

The yield from these springs has been fully maintained.

Finance.

The financial position of the undertaking still continues to develop, and is highly satisfactory.

DRAINAGE, SEWERAGE AND SCAVENGING.

The emptying of dustbins and general scavenging is carried on by the Borough Council's own employees except in Lexden and upon War Department land, where it is carried out by contractors.

The ordinary house refuse is collected once a week, but upon War Office property daily collection is carried out.

The carts used, when full, are covered with large sheets made of canvas or some similar material, which are tied down to prevent dust and rubbish being blown from the carts. It would be an improvement if dust-carts, with metal covers in which were sliding panels, were used. These would be better for two reasons. Firstly, in the present system dust and dirty paper, etc., can blow off the cart even when the cover is tied on, and until the cover is on the cart remains open; and secondly, carts with metal covers would hold a good deal more than the present carts, and so more rubbish would be collected in the same time.

Moveable galvanized iron dust-bins are still being insisted upon in place of insanitary ash-pits, old fish-boxes, worn-out buckets, etc., that are still found doing duty as dust-bins, and during 1914 over a thousand such alterations were made. In the last five years **3,266** proper covered moveable dust-bins have been put in where previously there existed an improper receptacle or no receptacle at all.

The billeting of a large number of troops upon the town through the winter months threw a great amount of additional work upon the Health Department. It was arranged that the Inspectors should undertake house to house Inspections in the parts of the town in which the troops were billeted, and special visits were paid to all large empty houses which had been taken over by the troops, and to all places where wash-houses, kitchens or latrines had been erected.

Several suggested sites had to be condemned, and to prevent the centre of the town being billeted, the houses in the centre being somewhat congested and many of the streets narrow, one battalion remained under canvas until a sufficient number of huts were ready for them.

All latrines that were put up in the town were of the simple bucket-type, and the emptying of these was undertaken by the Surveyor's Department and efficiently carried out, not one complaint being received about nuisance from latrines.

The Borough Surveyor, Mr. H. Collins, has kindly supplied the following information upon the drainage and sewerage work of his department during the year:—

Drainage Works.

Glazed stoneware sewer pipes have been laid as follows:—

St. Nicholas Street	...	140	lin. ft. of 9 inch
Butt Road	... ..	200	„ „ 9 „
High Street	... ..	50	„ „ 6 „ (relaid).
		<hr/>	
Total	...	390	lin. ft.
		<hr/>	

1 lamphole has been constructed.

Reed Hall Camp.

2820 9-inch glazed stoneware pipes.

1250 6-inch „

10050 4-inch „

60 manholes have been constructed.

The total length of sewers in the Borough is now 62 miles, 5 furlongs, 134 yards.

Buildings and Drains.

92 plans have been submitted to the Council, representing 47 dwelling-houses, 2 public buildings, 3 workshops, 33 additions to buildings, and 34 other buildings.

Buildings and drains have necessitated 1,122 inspections.

31 dwelling-houses and 57 other buildings have been erected.

63 houses, old and new, have been provided with new drains and sanitary fittings.

All new drains have been subjected to a water test before being passed for use.

Removal of Refuse and Cleansing of Streets.

The Council have caused to be removed :—

10354	cart loads of house refuse.
956	„ trade refuse.
382	„ garden refuse.
727	„ sewage from deadwells.
1314	„ slops from street gullies.
7846	„ road scrapings and sweepings, and
21299	truck loads of horse droppings, and other refuse from streets and roads.

The whole of the refuse has been removed from the Camp and Barracks and other War Dept. properties by Messrs. Collier & Co., under Contract with the Council, and from all the houses in the village and district of Lexden by arrangement with a local farmer.

Watering Streets and Roads.

10,469,350 gallons of water have been used for street and road watering, and road making.

Treatment of Roads for Prevention of Dust.

202 tons of tar from the local Gas Works were used during the summer months on the principal roads of the Borough for the prevention of dust, with very good results.

Sewage Outfall Works.

558,225,000 gallons of sewage have been pumped into the tanks at these Works, equal to an average daily flow of 1,529,384 gallons. After precipitation a residue has been left of 26,663 tons, approx. of semi-solid sewage, which has been treated with lime and reduced by pressing to 5,332 tons, approx. of portable manure, or sludge. This sludge is disposed of to farmers and others in the district.

REPORT OF THE SANITARY INSPECTOR.

I have the honour of presenting to you my Nineteenth Annual Report.

Complaints as to Nuisances.

The number of complaints received during the year was 471. Upon the receipt of a complaint a prompt and early visit is made to the premises, and where a nuisance exists the usual notice is served upon the responsible person causing the nuisance, calling upon him to abate the same. This usually has the desired effect. Notices are served upon the occupier where he is responsible, *i.e.*, for such nuisances as foul accumulations of manure in back yards, overcrowding, the keeping of animals in a filthy condition, or in contravention of the Bye-Laws with respect to nuisances. Such notices are usually readily complied with.

Drainage Work and Supervision.

As mentioned in previous reports, the supervision of drainage work, either in connection with the repair of old drains or the reconstruction of new drainage systems takes up a considerable portion of my time. All new drains are tested with water before they are covered up. It is often necessary to impress upon the occupier of premises that they have a responsibility with regard to the keeping of their drains well flushed and cleansed, and this practice is often the means of preventing their becoming choked.

Infectious Diseases and Disinfection.

All cases of notifiable diseases are visited by the Medical Officer of Health or myself, and where necessary, removed to your Infectious Diseases Hospital at Myland. The premises are thoroughly disinfected; all clothing, bedding, etc., is removed and steam disinfected. Where fatal cases of Phthisis occur, the room, bedding, etc., are disinfected. If the room is in a dirty condition a notice is served for it to be cleaned.

The total number of beds and other articles removed and disinfected by steam was 3,942, a very large number in excess of previous years.

House to House Inspection.

The Housing (Inspection of District) Regulations.

The systematic inspection of premises still continues as in previous years, and is carried out chiefly by my assistant. The defects discovered by this method of inspection are usually first dealt with by an informal notice, and followed by a statutory notice if the owner fails

to comply with the preliminary one. I have specially inspected many houses under the Housing, Town Planning, etc., Act, 1909, and other houses reported to me under the above regulations have been inspected and reported upon. 12 houses, owing to their insanitary and unsatisfactory condition from a structural point of view were reported to the Borough and Port Health Committee. The tabulated statement gives some idea of the defects discovered and the streets inspected.

In addition to the above inspections a large number of houses have been inspected during routine work, including those where cases of infectious diseases have occurred, special inspection of premises where no complaints have been received, and also premises contiguous with houses occupied by outworkers. 1,032 houses in which soldiers were billeted were also inspected. During the year the total number of houses inspected in the Borough was 4,295. As in previous years the work of abolishing old and insanitary ash-pits is progressing very favourably, and the more modern and sanitary dust bins are taking their place. This cannot be otherwise than beneficial from a public health point of view as many of the old ash-pits were situated near the houses and in some instances under the bedroom windows. The speedy removal of all refuse from the premises reduces to a minimum the breeding ground of flies. Thus the danger of flies contaminating the food supply in the house, especially milk, is greatly lessened, as I find that flies and filth seem inseparable. A list of houses without ash-pits were supplied to me by the Borough Surveyor. I caused an inspection to be made of these premises, and notices were served upon the owners to provide sanitary dust bins. When the owners made default in complying with an informal notice I reported the fact to the Borough and Port Health Committee and in each instance instructions were given for Statutory notices to be served, and the majority of these were complied with. If an owner remained obdurate and refused to carry out the notice, the Council did the necessary work and charged him with the cost. This procedure had a marked effect, causing the work to be carried out more rapidly and the nuisance being quickly abated.

I am pleased to report that during 1914 no fewer than 1,044 new sanitary dust bins were supplied to premises, and such work must tend to improve the health of the Borough.

The following table gives at a glance the progress made in this direction since the year 1910.

Dust bins supplied to houses in 1910	...	103
„ „ „ 1911	...	374
„ „ „ 1912	...	1202
„ „ „ 1913	...	543
„ „ „ 1914	...	1044

Registered Common Lodging Houses.

There are three of these in the Borough and they have been regularly visited and inspected. They are kept clean and their general condition is satisfactory.

Tents, Vans, Sheds, and Similar Structures.

When it has come to my knowledge that any vans had entered the Borough, I made an inspection of them in order to see if any overcrowding existed. Although the people who occupy these vans are of the gipsy type, and wander from place to place, I have rarely found one of the vans to be in a filthy condition.

Offensive Trades.

The premises where these trades are carried on have all been visited. They include gut scrapers, rag and bone dealers, marine store dealers, fat melters, bone and skin dealers, and premises used for the frying of fish. The latter premises have all been specially inspected during the year, in order to see if the Bye-laws in force in the Borough have been complied with. I reported one such fried fish shop, and suggested that proceedings should be taken if the occupier (after being written to by the Town Clerk) failed to put his premises into a proper condition. I am pleased to report that such works were carried out without proceedings having to be taken against him.

No applications have been received during the year for any premises to be registered for fish frying purposes.

Slaughter Houses.

The number of Licensed and Registered Slaughter Houses remains the same as last year, viz., 10 Registered and 10 Licensed.

Food Inspection.

It is my usual practice to visit all the Slaughter Houses in the Borough during the time of killing if possible, as this gives me a better opportunity of judging the quality of the meat before it is exposed for sale. In many instances it is impossible for me to see the actual slaughtering taking place, and many of the internal organs are sold without any inspection being made of them. I also make it a practice to inspect butcher's shops, fish shops, ice cream shops, etc., and I invariably visit on Saturday evenings, stalls and barrows, on which fruit and vegetables are exposed for sale.

The subjoined table gives the amount of food condemned as unfit for human consumption which in all cases was voluntarily surrendered, and subsequently destroyed :—

27	Sheep's Plucks.
35	„ Livers.
5	Stone of Haddock.
1	Kit of Crabs.
6	Stone of Shrimps.
1	Leg of Mutton.
1	Stone of dried Codling.
3	„ Kippers.
4	Cwts. of Mackerel.

Public Health (Regulation as to Food) Act, 1907.

Periodical inspections have been made of food stuffs entering by way of the port under the above regulations. Such food as cheese, nuts, oranges, apples, tinned foods, wheat, barley and bananas were examined. No seizures were made.

My attention has been directed during the year, towards enforcing a proper and sufficient water supply to many hand flushed water closets, still existing in the Borough. This work proceeds very slowly, although it is gratifying to report that 70 closets have been supplied with flushing apparatus and a water supply for cleansing purposes. This is a fair beginning, and I anticipate reporting a yet larger number of water closets that are without any flushing apparatus or water supply for cleansing purposes.

Statement A	Public Health Acts.	Factory & Workshops Acts.
Complaints received	468	3
Visits made to Slaughterhouses	439	0
Visits made to Bakehouses	4	118
Visits made to Dairies and Milkshops	172	0
Visits made to Cowsheds	49	0
Workshops Inspected	35	282
Workshops Cleansed	0	17

Housing.

Houses Cleansed under P.H.A.	25	2
Houses Disinfected	299	0
Articles of Bedding and Clothing Disinfected ...	3,942	0
Overcrowding Abated	29	2
Houses Closed	0	0
Houses placed in Habitable Repair	2	0
Defective Roofs Repaired... ..	36	3
Rain-water Guttering and Pipes Repaired ...	48	4

Drainage and Sewerage.

Cesspools Abolished	9	0
Houses Connected with Sewers	11	0
Privies Abolished	10	0
Privies Converted into Water Closets	10	0

Statement A	Public Health Acts.	Factory & Workshops Acts.
Privies and Water Closets Repaired	40	2
New Closets Built... ..	22	3
Water Supply for Closets Provided	64	6
Defective Water Fittings for W.C.'s Repaired ...	58	9
Filthy Closets Cleansed and Limewashed ...	10	2
Water Closets Unstopped... ..	62	3
New Water Closets—Pans Fixed	53	5
New Seats and Risers Fixed	35	4
New Floors Laid or Repaired	33	4
Drains Unstopped... ..	95	8
Drains Repaired	18	1
Old Drains Abolished	4	0
New Drains Laid	14	1
Disconnection Syphons Fixed	6	1
Disconnection Chambers Built	6	1
Fresh Air Inlet Pipes Fixed	7	1
Foul Air Exit Pipes Fixed	6	1
Bell and other Insanitary Traps Abolished ...	29	0
Trapped Yard Gullies Fixed	60	0
Defective and Insufficiently Ventilated Soil Pipes	3	0
Sink and other Wastes Trapped or Disconnected		
from Drains	10	0

Statement A	Public Health Acts.	Factory & Workshops Acts.
Nuisances.		
Ashpits Abolished... ..	71	10
Ashbins Provided	962	82
Manure and Offensive Matter Removed	62	2
Matters Reported to Borough Surveyor's Department	68	0
Animals Improperly Kept or Removed	46	6
Nuisances Detected or Reported	1,126	129
Nuisances Abated	1,055	122
Informal Notices Served	1,130	129
Statutory Notices Served	190	0
Other Blemishes Abated	138	14
Other Matters.		
Yards Paved	11	0
Seizures or Surrenders of Unsound Food	41	0
Summonses taken out	1	0
Samples of Water taken for Analysis	5	0
Wells Sunk, Cleansed or Repaired	1	0
Water Supply Provided for Domestic Purposes	3	0
Leaky Taps Repaired where drawing from public mains	47	12
Ventilation Provided	9	0

It was found necessary to institute legal proceedings in order to procure the abatement of a nuisance in one case only during the year, as the owner failed to comply with the Statutory Notice served upon him. The case came before the Court in the present year, and was adjourned in order to give the defendant time to carry out the necessary works. Finally the statutory notice was fully complied with, and the summons was then withdrawn upon the payment of costs by the defendant.

Drain Testing—Statement "B."

The following table shows the locality of Sewer Gas escapes:—

Into Kitchens and Sculleries	...	...	1
„ Cellars	...	...	1
„ External Water Closets	...	...	5
„ Internal Water Closets	...	...	4
„ Dining Rooms and other parts of house	...	...	2
From Heads and Joints of Rain Water Pipes	...	...	4
„ Joints of Soil and Vent Pipes	...	...	15
„ Defective Drains	...	...	8
„ Defective Traps	...	...	4

Factory and Workshop Acts.

The total number of Workshops on the register is 573. The premises to which particular attention is given are:—Bakehouses, workshops, factories, laundries, and those of dressmakers, milliners, tailoresses, shirt-makers, upholsterers, basket-making, etc. The number of lists received was 97, giving the number of persons employed (i) within the Borough—1586. (ii) outside the Borough—952.

Destruction of Rats.

The man appointed to catch rats has during the year caught 4,528. He is a part time man and in addition to the catching of rats he devotes one day in each week to the poisoning of rats, and doubtless many hundreds more are by this method exterminated.

Troops.

In consequence of the National crisis and the outbreak of hostilities many thousands of men were quartered in the town as billets. The houses in which the men were billeted have been visited and inspected (as far as it was possible to do so) in order to see if the premises were overcrowded, dirty, or if any sickness existed which might prove to be of an infectious nature.

In addition to the inspection of billets, I personally inspected latrines, cook-houses, wash-houses, etc., in order to see that no insanitary conditions were caused by such a large influx of troops.

In conclusion, I beg to thank the Chairman and Members of the Borough and Port Health Committee for the continual support that they have given me in the carrying out of the varied duties connected with the Public Health Department.

I am, Gentlemen,
Your obedient servant,
THOMAS WELLS,
Inspector of Nuisances.

OFFENSIVE TRADES.

The number of Offensive Trades carried on in the Borough remains the same as in the previous year:—

Fish Frier	...	...	...	15
Gut Scraper	...	...	...	2
Fat Melter or Extractor	...	...	...	1
Rag, Bone and Skin Dealer	...	...	...	4

All the premises upon which fish-frying is carried on have been brought up to the standard laid down in the Bye-laws. In no case has it been necessary to appeal to Statutory powers for this purpose, in every instance the occupier realizing the wisdom of the alterations required and carrying them out upon receipt of an informal notice.

One occupier was obstinate at first but a threat of proceedings had the desired effect and the work was satisfactorily carried out.

DISINFECTION OF CLOTHING, ETC., FOR THE TROOPS.

Soon after the fresh troops arrived in Colchester it was found necessary to arrange for a large amount of disinfection for them. Many of the men were verminous and such a condition rapidly spreads among persons crowded together.

The Disinfector at the Military Hospital was kept constantly at work and as much help as possible was given by the Disinfector at the Mile End Isolation Hospital.

After October 12th a record of the articles disinfected at the hospital for the troops was kept. It shows that in three months the following number of articles were disinfected.

Blankets.	Bundles of Clothing.	Paliasses.
888	279	79

This was all done free of charge for the troops.

BILLET INSPECTION.

Inspection of all houses in which men were billeted in the Borough was begun on October 16th.

The result of this inspection is briefly given below.

Number of houses visited	...	...	...	1042
„ in which men were billeted				551
Number of men in these billets	...	...		1454
(Average number of Men per house 2.6)				
Number of houses found overcrowded	...			29
Number of these abated by end of the year				28
Other defects	...	...	...	13

LOCAL ACTS, GENERAL ADOPTIVE ACTS, AND BYE-LAWS IN FORCE IN THE DISTRICT OF PUBLIC HEALTH IMPORTANCE.

There are two old Local Acts still in force in the Borough but the sanitary work they enforce is now carried out under more recent Acts and Bye-laws and no action has been taken under them for many years.

51 George III., cap. 43, 6th May, 1811.

10 and 11 Victoria, Session 1847.

General Adoptive Acts.

Name of Act.		Date of Adoption.
The Public Health Acts Amendment Act, 1890	...	6th May, 1891
The Infectious Diseases (Prevention) Act, 1890	...	1st July, 1903
The Notification of Births Act, 1907	... ..	1st March, 1911
The Public Health Acts Amendment Act, 1907	...	13th Dec. 1911
(The whole of Parts V. and VI. and certain sections in Parts II., III., IV. and X.)		

Bye-laws and Regulations.

In respect of:—

Slaughter Houses.

Common Lodging Houses.

New Streets and Buildings.

Water Closets.

The Connection of Drains with Sewer.

Nuisanees.

Cleansing and Scavenging.

Offensive Trades.

Dairies, Cow Sheds and Milk-Shops.

The Employment of Children and Street Trading.

THE FOOD SUPPLY.

Sale of Food and Drugs Acts.

The following table gives the results of the Analyses carried out under the above Acts during the year :—

Samples	No. of Samples.	Adulterated.	Nature of Adulteration.
New Milk ...	52	6	Six, Fat Abstraction, 57·0% ; 13·4% ; 20·0% ; 3·3% ; 6·6% 16·6% respectively.
Skim Milk ...	1		
Butter ...	12		
Coffee ...	6		
Tea ...	1		
Flour ...	2		
Oatmeal ...	1		
Whiskey ...	1	1	Diluted to 7·7 degrees below the legal limit.
Rum ...	1		
Brandy ...	2	1	Diluted to 6·6 degrees below the legal limit.
Gin ...	2		
Porter (1), Ale (1), Stout (1), Beer (1) ...	4		
Port Wine ...	2		
Lard ...	1		
Vinegar ...	3		
Cream ...	4		
Preserved Cream ...	2		
Bread ...	2		
Cheese ...	1		

Samples	No. of Samples.	Adulterated.	Nature of Adulteration.
Sago ...	1	1	100% Tapioca
Arrowroot ...	2		
Rice ..	1		
Yeast ...	1		
Sweets ...	1		
White Pepper	1		
Cocoa ...	2		
Baking Powder	3		
Drugs ...	6		
	118	9	

The Drugs consisted of two samples of Sodium Bicarbonate and one each of Linseed, Citrate of Magnesia, Borax and Paregoric.

Nine samples were found to be not genuine, and in five instances prosecutions were instituted, with the results stated below:—

1. WHISKEY. 32·7 under proof. Fined £2 and costs (eighteen shillings).
2. BRANDY. 31·6 under proof. Dismissed on payment of costs (nineteen shillings and sixpence). The vendor relied upon a printed notice that was displayed for his protection, and this was successful.
3. NEW MILK. 57% fat deficient. Fined £10 and costs (£2 8s. 11d.).
4. NEW MILK. 13·4% fat deficient. Dismissed on payment of costs (eight shillings and sixpence).
5. NEW MILK. 20·0% fat deficient. A sample of the same milk as sold to vendor of 4 above, but taken in course of delivery. Fined £2 and costs (£1 0s. 6d.)

In three cases, those of 3·3%, 6·6% and 16·6% fat deficient, the vendors were warned by the Watch Committee.

Last year a table was given shewing the results of the "appeals to the cow" in all cases where a milk sample was found to be defective. The appeal to the cow means the taking of a sample at the time of milking from the farm from which the original milk came. In 1914 no samples were taken at the farms, but in two cases samples were taken while the milk was in course of delivery from the farm to the vendor. These were taken because samples collected by the Food Inspector from milk-sellers were found defective. In both cases the milk was deficient in fat.

During the past five years, in many cases where milk has been found upon sampling to be not genuine, a direct appeal has been made to the herds from which the milk came, and such milk has repeatedly been found to be below the standard of the Board of Agriculture.

The next table sets out the occasions upon which these appeals have been made with the time of sampling and the results.

Milk Samples from Farm Herds.

Farms.	Year.					Milk Fat, under 3%	Milk Fat, 3% or over.	Month in which Non-genuine Samples were collected.
	1910	1911	1912	1913	1914			
1	1	...	...	1	1	3	...	February 2nd
2	1	...	...	...	...	...	1	March 1st
3	2*	...	1	...	...	1	2	May 1st
4	...	1	...	...	...	...	1	June 1st
5	...	1	...	...	...	1	...	July 3rd
6	...	1	...	2*	...	1	2	December 2nd
7	...	1	...	...	...	...	1	
8	...	...	2*	1	...	2	1	
9	...	...	2*	...	...	...	2	
10	...	...	...	1	...	1	...	
11	...	...	...	1	...	1	...	
Totals	4	4	5	6	1	10	10	

The * is placed against certain numbers above to distinguish farms where the herds are milked in two divisions. In some instances one part of a herd has given genuine milk, while milk from the other part is not genuine.

It is probable that many, if not all, these cases were due to the same causes which may be briefly stated as follows:—

1. Excessive interval between the times of milking.
2. Poor food.
3. The breed of cows in the herd. Dutch cows give a plentiful supply of milk of poor fat content.

The above samples were all collected between 5.45 a.m. and 6.45 a.m.

The total number of milk samples that have been collected each year with the time of collecting is set out below.

		1910.		1911.		1912.		1913.		1914.	
		Genuine	Non-Genuine	Genuine	Non-Genuine	Genuine	Non-Genuine	Genuine	Non-Genuine	Genuine	Non-Genuine
Morning	...	28	5	38	9	36	8	27	16	42	6
Afternoon	...	1	...	...	...	1	...	12	...	5	...

It will be seen that out of 234 samples collected during these five years, 215 were collected in the morning and only 19 in the afternoon. This is done because the afternoon milk always is found to be genuine. The reason for this is that if the morning milking is done about 6 a.m. and the afternoon about 2 p.m. the intervals between the times of milking are most ill-balanced. Before the afternoon milking there is an interval of about eight hours, whereas before the morning milking there is an interval of 16 hours and the milk is therefore plentiful in quantity but poor in quality.

PUBLIC HEALTH (MILK & CREAM) REGULATIONS, 1912.

Report for the Year ended 31st Dec., 1914.

1. Milk and Cream not sold as Preserved Cream.

		Number of Samples examined for the presence of a preservative.	Number in which a preservative was reported to be present.
Milk, New...	...	58	...
„ Skim	...	1	...
Cream ..	...	4	...

2. Cream sold as Preserved Cream.

(a). Instances in which Samples have been submitted for Analysis to ascertain if the statements on the label as to preservatives were correct.

(I.)	Correct statements made	...	2
(II.)	Statements incorrect	...	...
Total			2

(b). Determination made of milk-fat in cream sold as Preserved Cream.

(I.)	Above 35 per cent	...	...	2
(II.)	Below 35 per cent	...	...	...
Total				2

(c). No instances where (apart from Analysis) the requirements as to labelling or declaration of preserved cream in Article V. (1) and the proviso (2) of the Regulations have not been observed, have occurred.

3. Thickening Substances.

No evidence of their addition to Cream or to Preserved Cream has been found.

All milkshops, dairies and cowsheds are constantly inspected. In all 221 visits were made to places where milk was handled, and care is taken that many such visits are paid when milking is taking place.

The majority of farmers now insist upon a higher standard of cleanliness than was the case five years ago, and it would appear that the leaflets that are distributed to all those who deal with milk are having the desired effect.

There is still need for a more efficient system of meat inspection, not because bad meat is constantly being discovered or reported, but because the Sanitary Inspector, who is also the meat inspector, already has his time so fully occupied that he is unable to give so much time to this important part of the work as should be the case.

A detailed list of meat and other foods that were condemned as unfit for human consumption is given in the Sanitary Inspector's Report, and it is noticeable that the greater portion of the condemned food was fish in bulk or the poorer parts of the sheep's carcase. The reason for this is that in many instances the Inspector is asked to see boxes of fish that the consignee considers bad, for if they are condemned by the Inspector, the consignor bears the loss; and sheep's plucks because the Inspector makes a point of seeing certain plucks that would be offered for sale each Saturday night, before they are so offered.

Although during the year 439 visits were made to the slaughterhouses in the district, yet it is impossible for the Inspector to be frequently present soon after slaughtering has taken place to examine the carcasses in each slaughterhouse, and this is particularly difficult where slaughter does not always take place upon the same day each week.

In this direction alone further assistance is becoming necessary, and as more work is thrown upon the Health Department each year, this work must not be allowed to slip into the background, for the Inspection of Food, and the places where food is stored or prepared for sale is one of the most important duties of the Public Health Department.

There has been no alteration in the number of slaughterhouses and bakehouses.

Slaughterhouses.		Bakehouses.
Registered.	Licensed.	
10	10	45

The bakehouses are constantly visited and inspected, 122 inspections having been carried out upon these premises during the year.

There is one underground bakehouse in the district.

HOUSING.

No doubt the outbreak of War accounts for the fact that fewer houses were built during 1914 than was to be expected from the average of previous years

In 1913 fifty new houses were built — in 1914 only 31. They were distributed among the four wards in the subjoined numbers.

Number of New Houses built in each Ward, 1914.

North Ward	...	...	...	7
South „	...	...	...	5
East „	...	...	...	0
West „	...	...	...	19
				<hr/>
Total				31
				<hr/>

All new buildings are erected under the supervision of the Borough Surveyor, and plans must be submitted and approved by the Council before building is begun.

No new building may be occupied until it has been inspected and approved by an Inspector of the Surveyor's Department.

Housing (Inspection of District) Regulations, 1910.

The two tables below give the number of houses that have been inspected for structural or sanitary defects since 1905 and the defects that were discovered during 1914.

Number of Houses Inspected for Defects, 1905-1914.

1905	...	...	...	501
1906	...	...	...	931
1907	...	...	...	689
1908	...	...	...	548
1909	...	...	...	653
1910	...	...	...	742
1911	...	...	...	522
1912	...	...	...	583
1913	...	...	...	853
1914	...	...	...	922
				<hr/>

Total in 10 years 6,944

Defects Discovered during Housing Inspections, 1914.

Name of Street.	Number of Houses Inspected.	Premises in a Dirty Condition.	Defective Drains.	Choked Drains.	Defective Water Clo-cets.	Defective Traps.	Number of Water Closets.	Number of Outside W.C.'s not supplied with Water	Premises Damp & Dilapidated.	Overcrowding.	Animals improperly kept.	Other Nuisances.	Separate Larders.	Premises without covered Ashbins.
North Station Road	72	1	2	..	..	5	86	26	1	..	..	15	33	24
Essex Hall Road	11	..	..	..	1	5	11	11	2	..	..	..	..	8
Harwich Road	162	..	1	1	1	..	165	47	3	2	..	29	71	65
Papillon Road.. ..	49	..	..	..	1	6	50	26	..	..	..	1	22	9
Balkerne Hill	35	..	..	..	2	4	33	24	2	..	..	4	4	26
St. Alban's Road	29	..	..	..	..	..	29	5	..	..	..	3	12	9
Castle Road	55	..	..	..	..	3	57	23	1	..	..	2	28	10
Gladstone Road	33	..	..	..	1	..	35	..	..	..	..	1	29	5
Meyrick Crescent	28	..	..	..	..	..	31	4	1	..	..	4	18	8
Lion Walk	12	..	..	..	..	..	12	4	..	..	..	2	4	4
Wimpole Road	67	..	..	..	..	..	81	5	2	..	..	5	33	9
St. Paul's Road	32	..	..	..	1	..	32	..	1	..	..	4	21	14
Orchard Road.. ..	11	..	..	..	..	..	11	..	..	..	..	..	11	2
Morten Road	25	..	..	..	2	..	25	1	3	..	..	2	8	5
Abbey Gate Street	19	..	2	1	2	1	23	6	..	..	..	13	11	7
New Town Road	18	..	..	..	..	..	19	4	..	..	..	1	10	2
Provident Place, North Hill	12	..	..	..	..	..	12	..	..	..	..	..	6	6
North Hill and Courts ..	74	1	..	4	3	1	69	25	2	1	..	13	18	14
St. John's Street	31	..	..	..	2	..	32	6	..	2	..	18	15	9
Beaconsfield Avenue.. ..	48	..	..	..	..	..	64	..	..	..	..	..	47	1
Salisbury Avenue	41	2	..	..	..	2	45	..	..	1	..	1	30	..
Bourne Road	58	..	..	1	..	..	58	..	2	..	11	5	36	..
Total	922	4	5	7	16	27	980	217	20	6	11	123	477	237

The 6,944 houses that have been inspected during the past 10 years are practically all different houses, very few houses that have been inspected twice being counted as two houses in this summary. In order to do this the town has been systematically mapped out into areas, and so soon as all the houses in one area have been visited, another area has been taken in hand, with the result that at the end of ten years the whole of the houses of the poorer parts of the town have been inspected and thousands of minor defects corrected.

The table of defects above does not show that these defects have been dealt with. Many of them are quickly remedied but others take many weeks before the necessary work is completed. Statement A in the Sanitary Inspector's Report gives a valuable summary of the work that has been done in the past year.

All houses that are found to be very defective are re-visited and inspected with a view to their being dealt with under the Housing, Town Planning, etc., Act, 1909. The following statement sets out briefly the work that has been done under the various Housing Acts during 1914.

Housing Inspection, 1914.

Number of Houses, 1911	...	...	9,218
„ 1914 (approx.)	...	...	9,500
Number of Houses Visited and Inspected :—			
1. Owing to Complaint	...	...	554
2. Owing to Infectious Disease	...	...	216
3. During Routine Work (including 1 and 2)	...	...	4,295
Number of Informal Notices served for Sanitary defects			1,259
„ Statutory Notices	„	„	190
„ Notices served for Overcrowding		...	31
„ Notices served for Uncleanliness		...	27
„ Notices complied with	...	...	1,177

Housing Inspection under Sec. 17 Housing, Town Planning, Etc., Act, 1909.

Number of Dwelling Houses Inspected	...	940
„ Dwelling Houses in which Defects were found		311

Number of Dwelling Houses the Defects in which were remedied without the making of Closing Orders	298
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Closing Orders.

Number of Dwelling Houses represented to the Local Authority with a view to the making of Closing Orders				11
Number of Closing Orders Made	...	...		13
„ Dwelling Houses which after the making of Closing Orders, were put into a fit state for human habitation	...	...		0

Demolition Orders.

Number of Demolition Orders made	...	...		9
„ Dwelling Houses demolished by Owners after Closing Order had been made	...			2
„ Dwelling Houses demolished after Demolition Order had been made	...	...		5
„ Dwelling Houses demolished upon representa- tions to the Owner without Closing Orders being made	...	...	...	0

Dangerous Buildings.

Number of Dwelling Houses represented to Local Author- ity as Dangerous Buildings		4
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Many notices that were served in 1913 were complied with during 1914 and similarly many served in 1914 are carried over into 1915 before the work is completed.

Some of the houses closed were extremely old. In one instance part of the walls of a cottage were built of wattle and daub, part of lath and plaster and part of brick. Each century had left its mark in repairs upon the house yet at last the higher standard of sanitation required made it necessary to condemn the building which no doubt had been considered an excellent dwelling-place some two to three hundred years ago, but which now complied with few of the simplest standards of what a house should be.

FACTORIES, WORKSHOPS, WORKPLACES AND HOMEWORK.

1. Inspection of Factories, Workshops and Workplaces.

Premises.	Number of	
	Inspections.	Written Notices.
Factories, including Factory Laundries	29	4
Workshops, including Workshop Laundries	236	28
Workplaces, other than Outworkers' premises included in Part 3 of this Report	17	3
Total	282	35

During the year there were no prosecutions in connection with these inspections.

2. Defects found in Factories, Workshops and Workplaces.

Particulars.	Number of Defects.	
	Found.	Remedied.
Nuisances under the Public Health Acts :—*		
Want of cleanliness	18	17
Want of ventilation ... ..	...	...
Overcrowding... ..	...	...
Want of drainage of floors ... ..	...	...
Other nuisances	22	20
Sanitary accommodation { insufficient unsuitable or defective not separate for sexes	...	...
Offences under the Factory and Workshop Acts—		
Illegal occupation of underground bakehouse (s. 101)... ..	...	...
Breach of special sanitary requirements for bakehousees (ss. 97 to 100)	14	14
Other offences, excluding offences relating to outwork which are included in Part 3 of this Report ... ..	..	...
Total	54	51

* Including those specified in sections 2, 3, 7 and 8 of the Factory and Workshop Act, 1901, as remediable under the Public Health Acts.

It was not found necessary to refer any of these defects to H.M. Inspector of Factories, nor were any prosecutions undertaken.

3. Homework.

Nature of Work.	Outworkers' Lists, Section 107.						
	Lists received from Em- ployers twice a year.			Lists received from Em- ployers once a year.			Notices served on Occupiers as to keeping or send- ing Lists.
	Lists †	Outworkers †		Lists	Outworkers		
		Con- tractors	Work- men.		Con- tractors	Work- men.	
Wearing Apparel, making, &c., cleaning and washing.. ..	72	..	1492	8	..	67	12
Household linen
Lace, lace curtains and nets
Curtains and furniture hangings
Furniture and upholstery ..	8	..	12	2	..	2	..
Electro-plate
File making
Brass and brass articles
Fur pulling
Cables and chains
Anchors and grapnels
Cart gear
Locks, latches and keys..
Umbrellas, &c.	2	..	4	..	..	..	..
Artificial flowers
Nets, other than wire nets
Tents
Sacks	2	..	2	1	..	6	..
Racquet and tennis balls
Paper, &c., boxes, paper bags
Brush making
Pea picking
Feather sorting
Carding &c., of buttons, &c.
Stuffed toys
Basket making	2	..	2	..	..	..	..
Chocolates and sweetmeats
Cosaques, Christmas crackers, Christmas stockings, &c.
Textile weaving
Total	86	..	1512	11	..	75	12

† The figures required in columns 2, 3 and 4 are the *total* number of the lists received from those employers who comply strictly with the statutory duty of sending *two* lists each year and of the entries of names of outworkers in those lists. The entries in column 2 must necessarily be *even* numbers, as there will be two lists for each employer—in some previous returns odd numbers have been inserted. The figures in columns 3 and 4 will usually be (approximately) double of the number of individual outworkers whose names are given, since in the February and August lists of the same employer the *same* outworker's name will often be repeated.

OUTWORK IN INFECTED PREMISES, SECTIONS 109, 110—Wearing apparel, making, etc., instances, 13: orders made (S. 110), 7.

4. Registered Workshops.

Workshops on the Register (s. 131) at the end of the year.	Number.
Bakehouses	45
Domestic Workshops...	31
Laundries	12
Dressmakers and Millinery	73
Other Workshops	412
Total number of Workshops on Register...	573

5. Other Matters.

Class.	Number.
Matters notified to H.M. Inspector of Factories :—	
Failure to affix Abstract of the Factory and Workshop Acts (s. 133, 1901)	1
Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshop Acts (s. 5, 1901) {	
Notified by H.M. Inspector ...	3
Reports (of action taken) sent to H.M. Inspector...	1
Other	0
Underground Bakehouses (s. 101) in use at the end of the year	1

Outworkers' Lists were sent in regularly and punctually, and only a few instances were found of failure to keep or permit inspection of the lists. In no case was prosecution required in connection with outwork.

The Infectious Diseases.
Tuberculosis,
and the Work of the
Borough Laboratories.

THE INFECTIOUS DISEASES

Infectious Diseases Notified, 1905-1914.

	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914
Small Pox	0	0	0	0	0	4	0	0	0	0
Scarlet Fever ..	223	37	45	128	82	79	56	28	98	197
Diphtheria	60	29	18	41	29	32	29	31	52	88
Typhoid Fever ..	12	12	8	11	5	2	4	1	8	17
Erysipelas	38	51	24	22	22	30	45	38	32	36
Puerperal Fever ..	0	0	2	1	4	4	6	0	2	1
Acute Poliomyelitis..	0	0	0	0	0	0	0	2	0	1
Cerebro-Spinal Meningitis	0	0	0	0	0	0	0	0	3	0
	333	129	97	203	142	151	140	100	195	466

**Deaths from Infectious Diseases registered in the
Borough, 1905-1914.**

[illegible]

Monthly Notifications, 1914.

Month.	Scarlet Fever.	Diphtheria.	Typhoid Fever.	Erysipelas.	Puerperal Fever.	Cerebro-Spinal Meningitis.	Ophthalmia Neonatorum.	Acute Poliomyelitis.	Pulmonary Tuberculosis.	Other Tubercular Disease.	Total.
January ..	16	7	3	4	..	..	..	..	4	1	35
February ..	46	6	2	3	..	..	..	..	6	4	67
March ..	27	7	1	1	1	..	..	..	14	5	56
April ..	9	5	5	2	..	..	..	..	8	2	31
May ..	14	8	1	3	..	..	1	..	10	3	40
June ..	3	3	1	2	..	..	..	..	12	4	25
July ..	4	6	..	5	..	..	2	..	7	1	25
August ..	6	6	..	1	..	..	..	1	7	2	23
September ..	6	4	..	2	..	..	..	..	7	3	22
October ..	12	13	3	4	..	..	..	..	11	3	46
November ..	28	15	1	2	..	..	..	..	5	2	53
December ..	26	8	..	7	..	..	..	..	2	..	43
Year 1914	197	88	17	36	1	..	3	1	93	30	466

BOROUGH ISOLATION HOSPITAL, MILE END.

The past year has seen great activity in connection with this Institution. For some time past it has been understood that two new wards were to be built to accommodate the increased number of patients that the Hospital would be called upon to receive from the neighbouring districts under the new arrangements. These districts are to send their infectious cases to the Borough Hospital, and accommodation is to be found for twelve cases of Tuberculosis in connection with the County Scheme.

The plans and full scheme has now received the approval of both the Local Government Board and County Council, and early in 1915 it is hoped that the buildings will be begun.

The erection of these wards necessitates an increase in the staff, and to accommodate the additional nurses and maids it was found that the Administration Block needed enlargement.

The Administration Block was originally an old farmhouse to which additions from time to time have been made. In considering the scheme for further enlargement it was found that the old part of the building was so old and defective that it was better to pull it down and rebuild rather than to attempt to patch it.

In this way an enlarged and up-to-date Administration Block will replace a building that, though no doubt picturesque and useful originally, has for some time been inadequate for the purpose to which it had been adapted.

Soon after the outbreak of war and as soon as Colchester and the neighbouring districts began to fill with troops undergoing training, anxiety was felt as to the accommodation for such cases of infectious disease as might occur amongst them. Representations were made both to the Local Government Board and to the War Department that the accommodation at the Borough Institution was considerably below the necessary minimum of beds when the large increase of population in the town caused by the troops was taken into account, and an immediate temporary increase of 50 beds in two wards of 25 each was asked for.

Similar increases in population occurred in other parts of Essex, and early in November a Conference of Hospital Authorities was summoned by the County Medical Officer of Health at Chelmsford.

The outcome of this Conference, so far as Colchester was concerned, was the proposed erection of two temporary pavilions of 22 beds each at the Borough Isolation Hospital.

These pavilions are built of a wooden frame-work faced inside and out with asbestos sheeting and roofed with asbestos tiles. They have stood the recent rough weather well, and promise to fulfil the object for which they were built most successfully.

Unfortunately, although representations were made early in September, the building of these wards could not be started until December, with the result that the Territorial Field Ambulance stationed in Colchester found it necessary to convert a dwelling-house into a temporary Isolation Hospital for Fever cases, the capacity at the Borough Fever Hospital being taxed to its uttermost.

The conditions under which these two temporary pavilions were erected are in general terms : —

1. That the Colchester Corporation shall let a contract for the building of the pavilions, and that one should be ready for occupation in four weeks and the second in six weeks from the time of the acceptance of the contract.
2. That the Town Council should provide the sewerage, water-supply, lighting and heating, whereas the War Office should provide the furnishing.
3. That at the end of the War the Town Council should take over the two pavilions at 60% of the total cost of their erection.
4. That the Town Council administer the additional hospital arrangements and undertake the removal of patients, necessary disinfection, etc., at a rate of five shillings per day per patient to be paid by the War Office.
5. That the War Office should supply a Motor Ambulance for the removal of patients, and that the Council supply a driver and running necessities.

Admissions to the Isolation Hospital, 1914.

Authority.	Scarlet Fever.	Diph- theria.	Typhoid.	Phthisis.	Other Diseases.	Total.
Colchester Borough ...	124	66	7	...	1	198
„ Garrison ...	49	23	3	...	2	77
„ Idiot Asylum ...	...	...	...	...	...	...
Essex C.C. ...	...	...	...	32	...	32
Tendring R.D. ...	12	2	3	...	...	17
Lexden & Winstree R.D. ...	1	15	1	...	...	17
Frinton-on-Sea U.D. ...	2	...	...	...	...	2
Walton U.D. ...	...	...	...	...	...	...
Brightlingsea U.D. ...	...	...	...	...	...	...
Wivenhoe U.D. ...	...	3	...	...	...	...
Totals ...	188	109	14	32	3	343

The above table shews that during 1914 a much larger number of cases were admitted to the hospital than in the preceding year when the total reached was 225.

Besides the cases actually suffering from an Infectious Disease 13 Diphtheria Contacts were admitted, 8 from the Civil Population and 5 from the Garrison.

Six of the Staff contracted an Infectious Disease, three Nurses and one Ward-Maid caught Scarlet Fever, and one Nurse and one Ward-Maid Diphtheria.

Seven deaths occurred at the Hospital from Diphtheria, two from Scarlet Fever, one from Scarlet Fever and Measles, and three from Pulmonary Tuberculosis.

SCARLET FEVER.

There was a great increase in the number of cases of Scarlet Fever notified during the year. For the five years previously the number had been very low and some increase was to be expected sooner or later.

In the early part of the year a large number of mild cases occurred, particularly in the South Ward. Many of the cases were so mild that it is most probable that some children who had the disease escaped notice, and after a few days illness the parents considered the child quite well and sent it back to school without seeking a doctor's opinion.

Such cases are not so infectious as the more severe, but they are infectious, some more than others, and thus the disease was kept going.

In the Autumn, with the influx of troops, and judging from the experience of other towns, an epidemic was to be expected, and strict precautions were taken to try and avoid such a calamity.

Though the number of cases increased considerably, yet the disease never became epidemic, and considering the very great increase in population and the crowded state of the town it is a matter for congratulation that the town escaped as lightly as it did.

The majority of cases that were notified were sent into the hospital. Out of 197 notified, 156 were admitted to the hospital—a percentage of 79·1.

The Outside Districts sent 15 cases of Scarlet Fever into the hospital.

Two deaths occurred in the District from Scarlet Fever, both at the Isolation Hospital. One patient died six hours after admission, the other two days after admission, the type of disease in both cases being very severe.

One child died from Scarlet Fever and Measles. This child was somewhat mentally defective and very difficult to keep clean, with the result that he contracted blood poisoning which proved fatal.

DIPHTHERIA.

It was the same with this disease as with Scarlet Fever, except that no marked increase occurred until after August, *i.e.* until after the great increase in population. Taking this into consideration the increase is not great. At no time was the disease epidemic. The Outside Districts sent 20 cases of Diphtheria into the hospital.

Seven deaths occurred in the hospital from this disease, six of which belonged to the district and one was of a visitor. The majority of these deaths were due to the serious condition of the patient not having been recognised soon enough by the relatives for antitoxin to have been given during the first three days of the disease. After this period the result of antitoxin administration is not nearly so satisfactory.

Out of 88 cases notified in the District 84 were admitted to the hospital, a percentage of 95.4.

No deaths occurred in the Borough from Diphtheria before removal to the Isolation Hospital.

ENTERIC (OR TYPHOID) FEVER.

Seventeen cases of Enteric Fever were notified and of these 10 were removed to the Isolation Hospital, a percentage of 58.8. Three of the cases were notified from the Garrison Hospital or Territorial Field Ambulance. Two of these had never been inoculated and one so shortly before the disease developed that probably the infection occurred just before or at the time the man was inoculated. Fourteen cases were notified from the civilian population. Two occurred in one family and two others were closely connected—aunt and nephew—though they did not live in the same house. One case was imported to Colchester from another district. This case was admitted to the Essex County Hospital with heart disease and then found to be suffering from Typhoid Fever.

Three deaths occurred in the district from Enteric Fever. No deaths from this disease occurred at the Isolation Hospital.

Four cases of Enteric Fever were received from the Outside Districts, one from Lexden and Winstree and three from Tendring.

SMALL-POX.

No cases of Small-Pox were notified during the year.

ACUTE POLIOMYELITIS AND CEREBRO-SPINAL MENINGITIS.

One case of Acute Poliomyelitis was notified in a child age 1 year and 7 months old. The attack was very slight and the child completely recovered with no paralysis left as a result of the disease.

No cases of Cerebro-Spinal Meningitis were notified during 1914.

Disinfection is carried out at the houses where cases of either of these diseases occur in the same way as in the case of any of the other notifiable infectious diseases.

OPHTHALMIA NEONATORUM.

This disease was made notifiable under the Order of the Local Government Board of 5th February, 1914, and the order came into force on 1st April, 1914.

Under the Order Medical Practitioners and Midwives are called upon to notify to the Medical Officer of Health the occurrence of Ophthalmia Neonatorum in any child upon whom the Practitioner or Midwife may be in attendance.

Ophthalmia Neonatorum is defined in the Order as meaning "A purulent discharge from the eyes of an infant commencing within twenty-one days from the date of its birth."

It was arranged that upon the receipt of a notification the Health Visitor should visit the parents and explain to them (if a doctor was not already in attendance) the gravity of the disease and the risk to the child of total blindness, and urge that medical attention should be sought at the earliest opportunity.

Three cases were notified during the year. All of them progressed favourably under treatment, and in from one to three months were completely cured.

THE NON-NOTIFIABLE INFECTIOUS DISEASES.

Measles was somewhat prevalent in the first half of the year, 406 cases being notified from the Head Teachers of the Elementary Schools.

Surprisingly few cases of Whooping Cough were so notified, and the number of Chicken Pox cases was unusually small.

Mumps was never epidemic but cases were reported almost continuously throughout the year.

Incidence of the Non-notifiable Infectious Diseases. In Four Weekly Periods.

Whooping Cough.	Measles.	Chicken Pox.	Mumps.
...	1	7	4
1	11	3	11
...	135	4	35
...	93	1	11
...	92	...	2
...	37	...	1
...	36	1	2
...	1	...	...
...
...
...	...	5	1
...	...	4	38
1	...	3	21
2	406	28	126

As in previous years, bottles of disinfectant are supplied, free of cost, to those in charge of a patient suffering from an Infectious Disease, when they apply at the Public Health Offices.

TUBERCULOSIS.

Gradually the scheme for the prevention and treatment of Tuberculosis has crystalised and now the beds at the Isolation Hospital, the Tuberculosis Dispensary and Tuberculosis Officer are established facts and the main arrangements are complete and any difficulties that may have arisen at first have been smoothed over or circumvented.

It was pointed out in the last Annual Report that Colchester and the neighbouring district were large enough to occupy the full time of one Tuberculosis Officer and that such officer should live in the Borough.

This has now come about, Dr. Macfie having been appointed to the position.

In order that the Medical Officer of Health might be fully cognisant of the work of this officer and to prevent the Tuberculosis work from being undertaken by two distinct departments, it was considered advisable to appoint the Tuberculosis Officer an Assistant Medical Officer of Health for Tuberculosis purposes.

Overlapping is thus completely avoided and as all cases of Tuberculosis are notified to the Medical Officer of Health he is able to keep the Tuberculosis Officer in touch with all the cases in the Borough. Similarly the Tuberculosis Officer reports from time to time to the Medical Officer of Health and is in a position to draw his attention to insanitary home conditions that he may note when visiting patients.

In May it was found advisable for the Health Visitor to be appointed Tuberculosis Nurse.

This appointment was certainly a step in the right direction as by this means the Health Visitor, who previously had visited all cases of Tuberculosis as an Officer of the Health Department, was now in a position to report upon such visits to both the Medical Officer of Health

and the Tuberculosis Officer, instead of two Nurses visiting each case, one from the Health Department and one from the Tuberculosis Dispensary as was previously the case.

The Dispensary is open in Colchester three times each week—upon Monday evenings and Wednesday and Saturday mornings.

During 1914 fewer notifications of Tuberculosis were received than in the previous year. This was to be expected, as the regulations making Tuberculosis compulsorily notifiable only came into force on the 1st February, 1913.

1913		1914
227	Number of Notifications received	188
	Number of cases to which these Notifi-	
160	cations referred	122
	Number of cases of Pulmonary Tuber-	
99	culosis	92
	Number of cases of Non-Pulmonary	
61	Tuberculosis	30
	Number of Deaths from Pulmonary	
34	Tuberculosis	46
	Number of Deaths from Non-Pulmon-	
18	ary Tuberculosis	4

The Notifications were upon Forms A—D as follows :—

Form A	Form B	Form C	Form D
124	7	34	23

On Form A cases are notified by General Practitioners or by Medical Officers of a Hospital or Institution when they have reason to believe that the case has not previously been notified. On Form B School Medical Inspectors notify cases, and on Forms C and D Medical Officers of Poor-Law Institutions or Sanatoria notify the admission or departure of patient to or from the Institution.

It would be of decided utility if the Medical Officers of Hospitals were also called upon to notify the admission and discharge of Tuberculosis patients upon Forms C and D.

The sex distribution of the 122 cases notified is given below with a table of the Death Rate for the past 10 years.

		Males.	Females.
Pulmonary Tuberculosis	... ..	57	35
Non-Pulmonary Tuberculosis	... ..	18	12

**Number of Deaths from Tuberculosis with the Death
Rate from Pulmonary Tuberculosis for the past
10 years.**

Year.	Deaths from Pulmonary Tuberculosis.	Death Rate of Pulmonary Tuberculosis	Deaths from other forms of Tuberculosis.
1905	44	1.09	12
1906	32	.79	20
1907	44	1.07	12
1908	45	1.08	11
1909	38	.90	21
1910	45	1.06	14
1911	29	.66	10
1912	39	.88	16
1913	34	.76	8
1914	46	1.01	18

The remarkable rise in the death rate from Pulmonary Tuberculosis should be noted. Not because it shows a remarkable increase in the disease or even an increase in its fatality. But because it more probably shows the result of more exact and scientific diagnosis. In previous years many cases that died from a chronic cough were put down as Chronic Bronchitis, which they very possibly were; but now

it is recognised that many cases of Bronchitis or Pneumonia are not cases of what is usually meant by these terms, but varieties of an infection by the Tubercle Bacillus.

Another way in which the importance of scientific methods is being realised is to note the steadily increasing number of specimens of sputum that are sent to the Borough Laboratory for examination for the Tubercle Bacillus.

Number of specimens of Sputum sent for examination 1909—1914 :—

1909	1910	1911	1912	1913	1914
47	90	86	113	165	188

The Tuberculosis Officer has kindly sent me the following statement of the work carried out at the Tuberculosis Dispensary in St. John's Street.

The procedure adopted in Colchester is as follows. When a patient is notified this patient is visited and instructions are given as to the care of sputum, the use of fresh air, the absolute cleanliness of the house and food utensils, in short advice profitable to the consumptive himself and for the well-being of the people in constant contact with him. If his private doctor wishes him to apply for Sanatorium Benefit the patient if Insured under the Act applies to the Clerk of the Essex Insurance Committee, if uninsured to the Essex County Council. A consultation is then held between the private doctor and the Tuberculosis Officer, the patient is examined by the Tuberculosis Officer and a recommendation is made for treatment under one of the following heads :—

- Sanatorium.
- Hospital.
- Dispensary.
- Domiciliary.
- Shelter.
- Extra Nourishment.

If a Sanatorium or Hospital is recommended the patient is put on the waiting list and is then sent into one of the 150 beds at the disposal of the County. If Dispensary the patient attends at the Dispensary and is under the care of the Tuberculosis Officer. If Domiciliary he remains under his own doctor. A Shelter is provided but only with

the sanction of the Medical Officer of Health. Extra Nourishment is only given when it is strictly and solely auxiliary to treatment. This is obviously to prevent overlapping with Poor Law Relief.

In Colchester, Sanatorium Benefit is running very smoothly with mutual benefit to all concerned. Complete co-operation is aimed at between all the authorities and between these and the general practitioner. No patient is examined at the Dispensary or treated there without the consent of his private doctor.

At the Dispensary, Tuberculin is used both diagnostically and therapeutically. Taking the year as a whole about 40% have been treated with Tuberculin. On the whole with success, but Tuberculin must be given with open-air, good food, etc., to be of any great value, and thus the ideal place for giving it is a sanatorium. Ambulatory cases cannot be expected to do as well for obvious reasons. Children and non-pulmonary cases do much better on it than adults. In no case was any patient damaged in any way by it.

Work of the Tuberculosis Dispensary, 1914.

Cases on the Register 1st January, 1914 :—Pulmonary cases 66, Non-Pulmonary 3.

	Numbers.
Patients attending the Dispensary	152
Attendances made by Patients	1328
Visits paid by the Tuberculosis Officer	121
„ „ „ Nurse	455
Cases for Diagnosis (including 5 contacts)...	80
Cases with Pulmonary Tuberculosis	43
„ Non-Pulmonary „	10
Cases not suffering from Tuberculosis	27

The following table shows the number of times each of the 152 cases attended the Dispensary.

110 Patients attended from 1 to 10 times.

19	„	„	„ 11 to 20	„
12	„	„	„ 21 to 30	„
7	„	„	„ 31 to 40	„
4	„	„	„ 41 to 50	„

There was a very large increase in the number of swabs examined for the Diphtheria Bacillus in the laboratory and in the number of specimens of sputum sent in.

The increase in the number of swabs is partly accounted for by the fact that a small outbreak of Diphtheria occurred at Lexden School, which necessitated the swabbing of all the scholars who attended the school. The result fully justified this proceeding as seven children who appeared perfectly healthy were found to be carrying the bacillus in their throats, and two unsuspected cases of the disease were discovered. The isolation of the cases and carriers at once put an end to the outbreak, and no further cases occurred in connection with the school.

WALTER F. CORFIELD, M.D., D.P.H.,

36 STANWELL STREET.

*Medical Officer of Health
and School Medical Officer.*

**Meteorological
and
Statistical Tables.**

Rainfall Returns.—Osborne Street Depot.

Month.				Total depth in inches.	Greatest fall in 24 hours.		Number of days with .01 or more recorded.
January	..	..	..	1.33	0.52	9th	11
February	..	..	..	1.76	0.48	21st	14
March	..	..	..	3.91	0.51	9th	25
April	..	..	..	1.02	0.24	4th	11
May	..	..	..	1.14	0.31	7th	14
June	..	..	..	1.06	0.63	11th	8
July	..	..	..	2.29	1.24	15th	15
August	..	:	.	0.71	0.15	5th	11
September	..	..	..	1.07	0.63	12th	5
October	..	..	..	1.31	0.47	25th	13
November	..	..	..	2.04	0.41	4th	16
December	..	..	..	5.17	1.10	28th	21
Total	..	..	..	22.81			164

Table 1.—Vital Statistics of Whole District during 1914 and previous years.

Year.	Population estimated to Middle of each year.	Births.		Total Deaths Registered in the District.		Transferable Deaths. †		Nett Deaths belonging to the District.				
		Uncor-rected Number	Nett.		Number	Rate.	Of Non-residents regis-tered in the District.	Of Resi-dents not regi-stered in the District.	Under 1 Year of Age.		At all Ages.	
			Number	Rate.					Number	Rate per 1000 Net Births.		
											Number	Rate.	Number	Rate.
1909	41,835	998	998	23·8	516	12·3	25	5	89	89·0	492	11·8
1910	42,275	958	958	22·6	551	13·0	43	3	87	90·1	511	12·0
1911	43,463	972	975	22·4	547	12·5	32	24	105	107·7	539	12·4
1912	44,160	870	873	19·7	500	11·3	50	20	56	64·1	470	10·6
1913	44,700	880	882	19·7	564	12·6	83	19	53	60·0	500	11·1
1914	45,140	880	882	19·5	667	14·7	153	13	73	82·7	527	11·6*

† "Transferable Deaths" are deaths of persons who, having a fixed or usual residence in England or Wales, die in a district other than that in which they resided. The deaths of persons without fixed or usual residence, *e.g.*, casuals, must not be included in Columns 8 or 9, except in certain instances. The Medical Officer of Health will state in Column 8 the number of transferable deaths of "non-residents" which are to be deducted, and will state in Column 9 the number of deaths of "residents" registered outside the district which are to be added in calculating the nett death rate of his district.

* This rate includes the deaths of 12 soldiers (6 English, 4 Belgian, 1 German, 1 Unknown) wounded in the war, and also the death of 1 Belgian Refugee. Without these the rate is 11·3.

Total population at all ages	..	..	..	..	43,452
Total families or separate occupiers	..	..	..	..	8,881
Area of District in acres (land and inland water)	..	..	..	..	At Census, 1911. 11,333

Table II.—Cases of Infectious Disease notified during the year 1914.

Notifiable Disease.	Number of Cases Notified.								Total Cases Notified in each Locality. (e.g. Parish or Ward) of the District.				Total Cases removed to Hospital.	
	At all Ages.	At Ages—Years.							North.	South.	East.	West.		
		Under 1.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 45.	45 and under 65.	65 and upwards.						
Small Pox
Cholera
Plague
Diphtheria(including Membranous Croup)	88	..	11	49	16	11	1	..	10	38	9	31	84
Erysipelas	36	1	..	2	4	11	12	6	6	14	14	2	1
Scarlet Fever	197	1	14	118	50	13	1	..	33	90	30	44	156
Typhus Fever
Enteric Fever	17	..	..	1	9	6	1	..	1	5	5	6	9
Relapsing Fever
Continued Fever
Puerperal Fever	1	..	..	..	1	..	..	..	..	1	..	..	..
Cerebro-spinal Meningitis
Poliomyelitis	1	..	1	..	..	..	..	..	..	1	..	..	..
Ophthalmia Neonatorum	3	3	..	..	..	..	..	..	2	1	..	..	..
Pulmonary Tuberculosis	93	..	2	10	28	31	18	4	18	33	22	20	..
Other forms of Tuberculosis	30	1	2	13	6	5	3	..	4	9	11	6	..
Totals	466	6	30	193	114	77	36	10	74	192	91	109	250

Isolation Hospital, Mill Road, Mile End, Colchester, provided by the Colchester Borough Council.

Notes to Table III.

The classification and numbering of Causes of Death are those of the "Short List" on page XXV. of the Manual of the International List of Causes of Death, which should be consulted and followed in all cases of doubt.

- (a) All "Transferable Deaths" of residents, *i.e.*, of persons resident in the District who have died outside it, are to be *included* with the other deaths in columns 2-10. Transferable deaths of non-residents, *i.e.*, of persons resident elsewhere in England and Wales who have died in the District, are in like manner to be *excluded* from these columns. For the precise meaning of term "transferable deaths" *see* footnote to Table I.

The total deaths in column 2 of Table III. should equal the figures for the year in column 12 of Table I.

- (b) All deaths occurring in institutions for the sick and infirm situated within the district, whether of residents or of non-residents, are to be entered in the last column of Table III.
- (c) All deaths certified by registered Medical Practitioners and all Inquest cases are to be classed as "Certified"; all other deaths are to be regarded as "Uncertified."
- (d) Exclusive of "Tuberculous Meningitis" (10), but inclusive of Cerebro-spinal Meningitis.
- (e) Title 19 should be used for deaths from Diarrhoea and Enteritis at all ages.

Table III.—Causes of and ages at Death during the Year 1914.

Causes of Death.		Nett Deaths at the subjoined ages of "Residents" whether occurring within or without the District.									Total Deaths whether of "Residents" or "Non-Residents" in Institutions in the District.
		All Ages.	Under 1 year.	1 and under 2 years.	2 and under 5 years.	5 and under 15 years.	15 and under 25 years.	25 and under 45 years.	45 and under 65 years.	65 and upwards.	
All Causes	{ Certified .. Uncertified ..	510 17	67 6	15 ..	14 2	19 ..	27 ..	56 1	109 5	203 3	259 ..
Enteric Fever		3	..	..	..	1	..	2	..	..	1
Small Pox .. .. .		..	..	..	..	..	..	..	..	..	..
Measles		18	2	8	5	3	..	..	..	..	..
Scarlet Fever		2	..	..	..	2	..	..	..	..	2
Whooping Cough .. .. .		..	..	..	..	..	..	..	..	..	..
Diphtheria and Croup ..		6	..	..	..	6	..	..	..	..	7
Influenza		8	..	..	..	..	..	1	5	2	..
Erysipelas .. .. .		..	..	..	..	..	..	..	..	..	..
Phthisis (Pulmonary Tuberculosis)		46	..	..	1	..	11	18	13	3	32
Tuberculous Meningitis ..		1	1	..	..	..	..	..	..	..	..
Other Tuberculous Diseases ..		3	..	..	..	..	1	..	2	..	2
Cancer, malignant disease ..		39	..	..	..	..	..	3	17	19	23
Rheumatic fever .. .. .		..	..	..	..	..	..	..	..	..	..
Meningitis (see note <i>d</i>) ..		4	1	..	1	2	..	..	..	..	..
Organic Heart Disease ..		54	..	..	1	..	..	4	16	33	35
Bronchitis		46	10	2	..	..	..	..	3	31	8
Pneumonia (all forms) ..		29	3	2	3	1	2	2	11	5	18
Other diseases of respiratory organs		6	..	..	..	..	..	1	3	2	1
Diarrhoea and Enteritis (see note <i>e</i>)		15	14	1	..	..	..	..	..	..	..
Appendicitis and Typhlitis ..		4	..	..	1	1	1	1	..	..	4
Cirrhosis of Liver		2	..	..	..	..	..	..	1	1	..
Alcoholism		2	..	..	..	..	..	..	2	..	..
Nephritis & Bright's Disease ..		23	..	..	1	..	..	..	13	9	22
Puerperal Fever .. .. .		..	..	..	..	..	..	..	..	..	..
Other accidents and diseases of Pregnancy and Parturition .. .. .		..	..	..	..	..	..	..	..	..	1
Congenital Debility and Malformation, including Premature Birth		30	30	..	..	..	..	..	..	..	2
Violent Deaths, excluding Suicide		17	..	..	..	1	7	6	..	3	4
Suicide		4	..	..	..	..	1	1	1	1	1
Other Defined Diseases ..		165	12	2	3	2	4	18	27	97	96
Diseases ill-defined or unknown ..		..	..	..	..	..	..	..	..	..	..
Totals		527	73	15	16	19	27	57	114	206	259
SUB-ENTRIES (included in above figures) :—											
Pneumonia		21	..	1	2	1	2	1	9	5	13

Notes to Table IV.

- (a) The total in the last column of Table IV. should equal the total in column 10 of Table I., and in column 3 of Table III.
- (b) Under Abdominal Tuberculosis are to be included deaths from Tuberculous Peritonitis and Enteritis and from Tabes Mesenterica.
- (c) The total deaths from Congenital Malformations, Premature Birth, Atrophy, Debility and Marasmus, should equal the total in Table III., for ages under 1 year, under the heading Congenital Debility, and Malformation including Premature Birth.

Want of Breast Milk should be included under Atrophy and Debility.

- (d) For references to the meaning of any other headings, *see* notes attached to Table III.

Table IV. — Infant Mortality.

1914. Nett Deaths from stated causes at various Ages
under 1 Year of Age.

Causes of Death.			Under 1 Week.	1—2 Weeks.	2—3 Weeks.	3—4 Weeks.	Total under 4 Weeks.	1—3 Months.	3—6 Months.	6—9 Months.	9—12 Months.	Total Deaths under 1 Year.
All Causes	Certified ..	..	18	7	..	1	26	14	13	9	5	67
	Uncertified ..	..	3	..	..	..	3	2	1	..	..	6
Measles ..	..	..	..	..	..	..	..	..	..	1	1	2
Tuberculous Meningitis	..	..	..	..	..	..	..	..	..	1	..	1
Meningitis (not Tuberculous)	..	..	..	..	..	..	..	1	..	..	..	1
Convulsions ..	..	..	1	2	..	..	3	2	..	1	..	6
Bronchitis ..	..	..	..	..	..	..	..	2	5	2	1	10
Pneumonia (all forms)	..	..	..	..	..	..	..	..	1	2	..	3
Diarrhœa ..	..	..	..	..	..	1	1	1	3	1	1	7
Enteritis ..	..	..	..	..	..	..	..	3	3	1	..	7
Gastritis ..	..	..	..	..	..	..	..	2	..	..	..	2
Suffocation, overlying	..	..	..	..	..	..	..	..	..	..	1	1
Atelectasis ..	..	..	1	..	..	..	1	..	..	..	..	1
Congenital Malformations	..	..	4	..	..	..	4	1	..	..	1	6
Premature Birth ..	..	..	15	5	..	..	20	2	..	..	..	22
Atrophy, Debility and Marasmus	..	..	..	..	..	..	..	1	1	..	..	2
Other Causes ..	..	..	..	..	..	..	..	1	1	..	..	2
Totals ..	..	..	21	7	..	1	29	16	14	9	5	73

Nett Births in the Year .. { Legitimate 839
 .. { Illegitimate 43

Nett Deaths in the Year of .. { Legitimate infants .. 62
 .. { Illegitimate „ .. 11

